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U.S. Bureau of entomology and plant quarantine, March 21, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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Reserve

To inform officials in Entomology and Plant Quarantine of recent developments associated with the war and relating to work in their field, the Bureau will issue, from time to time, statements under the above title. This information is made available so that those officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

CLASSIFICATION OF FEDERAL AGENCIES IN CONNECTION WITH WAR PROGRAM: The Bureau of the Budget, pursuant to Executive Order No. 9067, has established priority classification of the several Federal Departments and agencies, which classification shall be controlling as to transfers of personnel to war agencies. Class 1 includes most of the units of the War and Navy Departments, certain activities of the Treasury Department, the Lend-Lease activities of the Department of Agriculture, and others. Class 2 includes such agencies as State Department, Secret Service, and units from Interior and other agencies. Class 3 includes Foreign Agricultural Relations, Agricultural Adjustment Administration, Forest Service, Bureau of Agricultural Chemistry and Engineering, the Commerce Department (with the exception of the Bureau of Standards, Weather Bureau, Coast and Geodetic Survey, Office of Administrator of Civil Aeronautics), the Geological Survey of Interior Department, the Immigration and Naturalization Service of the Justice Department, the Bureau of the Budget, etc. Class 4 includes Bureau of Agricultural Economics, Bureau of Dairy Industry, Rural Electrification Administration, etc. Class 5 includes the Bureau of Entomology and Plant Quarantine, Bureau of Plant Industry, Bureau of Animal Industry, Bureau of Home Economics, Extension Service, Office of Experiment Stations, and most of the other Bureaus of the Department of Agriculture, many units of the Departments of Commerce, Interior, Justice, Labor, Federal Security Agency, the Post Office, and a number of other agencies and establishments.

LIBRARY WORK OF THE DEPARTMENT: "In accordance with Executive Order No. 9069, consolidating all libraries administered by agencies of the Department of Agriculture and all units of the Department providing library and bibliographical services and their functions, personnel, property, and records, and in accordance with Memorandum No. 973, I am hereby transferring the above-mentioned libraries and units to the Library, Department of Agriculture, under the supervision and direction of Mr. Ralph R. Shaw, the Department Librarian, acting as my personal representative. * * *

"The Department Librarian is responsible for the effective administration of all library facilities and services of the Department. He is to supervise the collection of current and historical printed material and its organization in the Library, and to devise and maintain a system by which the Department Library system will render maximum service; he is finally responsible for the operation of all libraries administered by agencies of the Department of Agriculture and all units of the Department providing library and bibliographical services, and for the determination of present and long-term needs of the Department for library and bibliographical services. He represents the Department on all library and bibliographical matters. (S) CLAUDE R. WICKARD, Secretary"

POLICY ON RELEASE OF EMPLOYEES FOR TRANSFER: Secretary Wickard's Memorandum No. 989 says: "The Director of Personnel, with my approval, has already established the Department's policy with respect to releasing personnel for transfer within the Department or to other

agencies of the Federal Government. Under this policy, bureaus and offices may not refuse to release personnel without the concurrence of the Director of Personnel. This applies as well to employees affected by the President's decentralization plans who desire to remain in Washington, D. C., or to transfer to departmental offices in the field. Hereafter, when a bureau or office agrees to the release of an employee for transfer to another bureau or office, and at the time of giving such release does not indicate the date when the employee will be available to report for duty in the other bureau or office, that employee will be subject to the reporting date set by the bureau or office to which transferring, if the transfer has been approved by the Director of Personnel. No bureau or office may hold an employee beyond 10 calendar days unless specific permission has been granted by the Director of Personnel.

"In this connection, the Office of Personnel's service for facilitating transfers of personnel under the decentralization plans should be utilized to the fullest extent. Information regarding the procedure for using this service has been furnished each bureau and office. As rapidly as vacancies occur, the Office of Personnel will assist in making replacements so as to avoid lapses in service and prevent hardship on the part of employees. Those who secure positions in other bureaus or offices of the Department by this means will continue to use their knowledge of the Department's programs to the greatest advantage.

"From the long-range standpoint, it will be best if we undergo, when necessary, a temporary inconvenience in a few bureaus or offices, if at the same time qualified employees can be shifted to other bureaus or offices in the Department, thus insuring against declining efficiency in the Department as a whole. Agriculture's part in the war effort is becoming increasingly important. We want to retain a qualified, efficient staff in the Department of Agriculture to do the tremendous job which we have ahead. When questions arise regarding the release of personnel to other bureaus or offices in the Department, bureau chiefs must keep in mind the Department's program as a whole, and do all within their power to retain somewhere in the Department the services of Agriculture employees even though the bureau or office concerned might have to find replacements through its own efforts or those of the Office of Personnel."

INSECTICIDES, FUNGICIDES, FUMIGANTS: While shortages in some chemicals are a fact, there is no priority, rationing or allocation of insecticides, fungicides or fumigants on the farmer level. Farmers should order through usual suppliers. Manufacturers have been given priority assistance to obtain necessary chemicals.

PRICE CEILING ON NICOTINE SULPHATE: Maximum prices to be charged by producers, and limits on mark-ups by distributors and dealers in nicotine sulphate, were requested in letters of February 13 to members of the industry from OPA Administrator Henderson. The letters confirm price levels suggested at a meeting of OPA and producers of nicotine sulphate in Washington on January 22 last. These requests, made at the Washington meeting, are repeated in Mr. Henderson's letter:

1. Producers of nicotine sulphate are not to sell, during the year 1942, 40 percent nicotine sulphate for agricultural uses in 50-pound drums at prices in excess of \$0.80 per pound delivered to distributors.

2. Producers of nicotine sulphate are not to sell, during the year 1942, 40 percent nicotine sulphate for agricultural uses in 10-pound containers at prices in excess of \$0.90 per pound delivered to distributors.

3. Distributors and dealers of nicotine sulphate are not to make charges for handling nicotine sulphate in excess of the following:

	<u>Distributors</u>	<u>Dealers</u>
50-pound drum-----	\$3.50	\$3.75
10-pound container-----	1.15	1.50

4. Schedules of 1942 prices to be quoted by producers of nicotine sulphate are to be submitted to Office of Price Administration in advance of publication.

5. The requests set forth above are subject to rescission or modification in whole or in part in such manner and at such time or times as the Office of Price Administration may deem necessary or advisable.

MERCURIAL COMPOUND PRODUCERS ASKED TO HOLD DOWN PRICES: Producers of mercurial compounds--used in pharmaceuticals, explosives, germicides, paints, insecticides, and other products--were asked by Price Administrator Henderson in telegrams March 4 to maintain for 60 days prices in effect on February 25, 1942.

CHLORINE: WPB has amended General Preference Order M-19 to set up a ladder of priority ratings for users of chlorine or products containing chlorine. Agricultural ratings follow: Manufacture of insecticides and fungicides, A-10.

No priority order is necessary to obtain from retail outlets products containing available chlorine in liquid form in a container of 1-gallon capacity or less or in solid form in a quantity of five pounds or less.

Orders for quantities above this amount of products containing available chlorine must be accompanied by a properly filled out Form PD-277.

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Orders for chlorine must be accompanied by Form PD-190 (in duplicate if order is placed with producer, or in triplicate if placed with distributor). The producer of chlorine cannot accept an order unless it is placed with him by the 10th day of the month preceding the month in which delivery is sought. The distributor of chlorine must have the order by the 5th day of the month preceding the month in which delivery is sought.

Products containing available chlorine are designated as follows: "Any product which readily releases chlorine; such products include, but are not limited to, all combinations of chlorine with caustic soda, soda ash, or lime, such combinations being commonly known by one or more of the following names: Sodium hypochlorite, liquid bleach, true or high-test calcium hypochlorite, chlorinated lime, chloride of lime, bleaching powder, or sodium chlorite."

TIRES: The seriousness of the situation is brought out in the following memorandum from the Office of Agricultural Defense Relations:

"The rubber situation is far more critical than people realize. Of the 200,000 tons available for civilian use more than half is for industrial uses and of the amount available for automotive equipment about half is allotted to new truck tires and the remainder to camelback for truck tires. No passenger automobile tires are being manufactured and no provision is made for manufacture in 1942, and at the present time we think no allotment has been made of camelback for passenger automobile tires. Definitely, this means that passenger automobiles will have no chance to continue operation after their present rubber equipment is used.

"We would like to call your attention to the arrangement made by the Procurement Office of the Treasury Department in connection with automotive equipment under their control. Only absolutely essential operations are being continued and tires are being removed from the other vehicles for use on the essential equipment. Other Government organizations are taking similar steps to assist in the conservation of our present limited supply of rubber. The Department of Agriculture and all its agencies

must recognize the extremely critical rubber situation or be subjected to unfavorable criticism by other groups."

The Department of Agriculture has no authority in connection with tire rationing. Tire Rationing Regulations were prepared and are administered by the Office of Price Administration under delegation of authority from WPB.

SAVE ANTI-FREEZE: WPB has asked the Department of Agriculture to help pass along the word to farmers that they should save anti-freeze for next year, instead of throwing it away. It should be drawn as soon as the cold weather lifts and kept in a container securely closed to prevent evaporation. Saving anti-freeze will lessen future demands for the chemicals used for war. Indications are that little, if any, anti-freeze will be available for civilian use next winter.

BEE INDUSTRY RECEIVING CONSIDERATION: Definite provision has been made by the Sugar Section, War Production Board, Washington, D. C., to permit beekeepers to purchase what sugar they need for their apiary operations. General Preference Order M-55, as amended, authorizes dealers in sugar to sell to beekeepers 80 percent of the amount of sugar they used last year month for month. The War Production Board has made provision for the industry to obtain all the tin cans it will need in sizes of 5 pounds and larger. This order notwithstanding, every effort should be made to use glass and other type containers for as much of the crop as possible. The indications are that a beekeeper, as such, with respect to automobile and truck tires will be treated the same as other farmers.

NAILS AND OTHER RESTRICTED MATERIALS USED IN THE MANUFACTURE OF BEE SUPPLIES: Package shippers, queen breeders, and honey producers who are unable to obtain nails or other allowable materials through their usual sources of supply, should fill out War Production Board Application Form PD-1A, covering a 60-day supply of such material.

Maintenance and repair items in connection with their equipment should be extended on Preference Rating Order P-100, for which copies can be supplied by the War Production Board upon application.

Copies of these forms are obtainable at local offices of the War Production Board. The forms, however, should be forwarded to the War Production Board, Washington, D. C.

CANS FOR SHIPPING PACKAGE BEES: Many package shippers have written voicing disappointment that Conservation Order M-81 provided only tins in 5-pound capacity and larger for honey and that no tins were provided for package bees. It should be considered that Order M-81 refers only to the packaging of foods and it was never intended, therefore, that the package shippers would come under its provisions. Mr. T. J. Beirne, Administrator, Containers Branch, War Production Board, has given his assurance that package shippers who have cans on hand will be permitted to use them for shipping bees during 1942; moreover, that those who have not already purchased cans or have an insufficient number will be able to obtain them, up to April 30, from can manufacturers for use in shipping bees. Mr. Beirne was willing to make this allotment on the basis that shippers had probably already purchased 90 percent of their needs of this year.

It is well for package shippers to consider using a different type of can. A black iron can, lacquered or painted or perhaps untreated, may serve the purpose very well. It is even possible that certain types of fiber containers would be satisfactory for shipping bees. Such matters certainly should be looked into in preparation for next year's shipping season when the scarcity of tin will be even more acute than it is now.

A-2 EXTENDED FOR USE OF APPROVED LABORATORIES: Preference Rating Order P-43, which assigns a rating of A-2 for the use of specifically approved scientific research laboratories, has been extended to August 31, 1942. It was scheduled to expire on February 28.

Only research laboratories recommended by a committee of the National Academy of Sciences are permitted to use the rating assigned by this order.

BAGS FOR FARM NEEDS: WPB has issued an order (M-107, March 10) to make cotton bags available for essential agricultural and chemical products.

Faced with shortages of bags because of military demands and decreased imports of burlap, agriculture is in a tight spot for bags for grains, flour, feed, meal, vegetables, nuts, sugar, seeds, potatoes, beans, peas, and fertilizers.

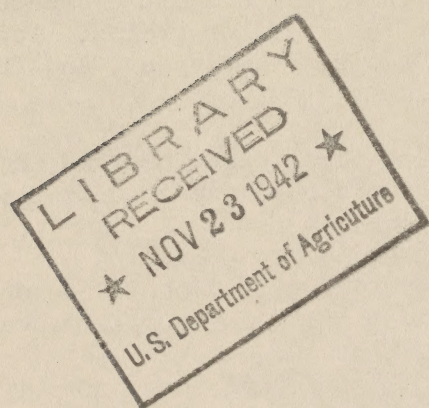
The order defines fabrics suitable for agricultural bags, assigns an A-2 rating for the manufacture of such fabrics. The order is expected to stimulate conversion of mills to agricultural bag production.

Bag manufacturers are restricted to a 60-day supply of cloth. Bag dealers and bag users, including farmers, are restricted to a 60-day supply of bags.

WPB asks that persons receiving products in bags return them promptly in order to keep bags in circulation.

The bag users, including farmers, must attach a properly signed form to their purchase orders.

ARE NURSERY WORKERS AGRICULTURAL? Southern Florist, February 27: Every nurseryman doubtless is interested in the outcome of a test case being fought in the courts by the Stark Bros. Nurseries, Louisiana, Mo., over the issue as to whether nursery employees are agricultural workers or not. The National Labor Relations Board, after a hearing, held that outside employees were not agricultural and therefore were subject to the Wagner act.



March 27, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

RELATIVE SCARCITY OF CERTAIN MATERIALS: The first of a periodic series of provisional reports on the relative scarcity of certain materials was issued March 12 by the conservation and substitution branch of the Bureau of Industrial Conservation. The first group contains some materials needed in the manufacture of insecticides.

The first group, Harvey A. Anderson, chief of the branch, pointed out, is made up of materials that generally are critically essential for the prosecution of the war. For these materials civilian industry must largely find substitutions.

GROUP I--Materials most vitally needed for war purposes; not generally available for civilian needs: Metals--Alloy steel--Iron alloys, alloy steel, wrought iron; aluminum; aluminum scrap; cadmium; calcium-silicon; chromium; cobalt; copper; copper scrap; iridium; lead; magnesium; nickel; tin; tinplate and terneplate; tungsten; tungsten (high speed tools); and vanadium.

Chemicals--Alcohol (Methyl); chlorinated hydrocarbon refrigerants; chlorinated hydrocarbon solvents; chlorine; toluene; diphenylamine; formaldehyde--paraformaldehyde, hexamethylenetetramine, and synthetic resins therefrom; phenols, polyvinyl chloride; and sodium nitrate (pure).

INSECTICIDE, FUNGICIDE SUPPLY: Market Growers Journal, March 1: L. E. Hitchner, secretary of the Agricultural Insecticide and Fungicide Association, says: "We have made a careful survey of supplies of various insecticides and fungicides and at the present time the status of these materials is as follows: Supplies of sulfur, chemical lime--plentiful. Supplies of nicotine sulfate--adequate. Supplies of oil sprays--plentiful. Supplies of arsenical materials--adequate at the present time. Supplies of rotenone products--possibly short."

ROTENONE PRICES: Grinders of powdered rotenone-bearing root were requested March 16 not to sell any quantity at a price in excess of 35 cents per pound for 5 percent pure rotenone-content grade. These prices are f.o.b. grinder's plant.

Rotenone is the active ingredient in many insecticidal dusts and sprays used by farmers producing food crops vital to the defense effort. All rotenone used in this country is imported. It is a toxic ingredient of the roots of various tropical plants. The product formerly came from British Malaya, the Dutch East Indies, and the Philippines, as well as Brazil and Peru. However, the bulk of imports recently has come from Peru, although Brazil has vast unplumbed resources of rotenone.

The finished insecticidal dust as sold to farmers contains from $\frac{1}{2}$ percent to 1 percent of pure rotenone. In other words, 100 pounds of $\frac{3}{4}$ percent rotenone dust would contain only 15 pounds of the 5 percent rotenone powder.

The increased cost of the rotenone alone from the 20-cent level to the proposed 35-cent ceiling, would justify an increase in the price charged farmers for $\frac{3}{4}$ percent rotenone dust of about $2\frac{1}{4}$ cents per pound over that which the farmer paid last year. Cost of other inert dilutents mixed into the finished dust has increased only slightly over a year ago.

OPA has received complaints that certain agricultural users of rotenone insecticides have been asked to pay double prices charged a year ago. Such increases are entirely unwarranted, OPA said.

CHLORINE ORDER EFFECTIVE APRIL 1 BECAUSE OF PRINTING DELAY: Because of delay in printing Form PD-277, Amendment No. 1 to General Preference Order M-19 relating to chlorine will not go into effect until April 1, it was announced March 9 by the Director of Industry Operations. The order limits the use of chlorine in a number of fields and was due to become effective February 25. The only change is that it will take effect April 1.

PRICES: The OPA set price ceilings--on NITRATE OF SODA, SULPHATE OF AMMONIA, and CYANAMIDE sales to farmers; amended schedules on--shipping of STEEL, ELECTRIC WIRE, CABLE and CABLE ACCESSORIES, BALE TIE WIRE, BED LINEN, RAW CANE SUGAR, WASTE PAPER, RAILROAD SCRAP, MERCURY, PASSENGER CAR EQUIPMENT for Ford Motor Co.; asked that prices be stabilized on--ROTENONE-BEARING ROOT, BED TICKING, RUBBER DRUG SUNDRIES, BENZOL, TOLUOL, XYLOL, and SOLVENT NAPHTHA; indicated--price ceilings on Lake Superior IRON ORE will be established in the near future.

FARM HARDWARE: The Department has heard of a number of cases of warehouses and hardware merchants who refuse to sell steel products to farmers, unless they have a priority certificate. Farmers do not need a priority rating when they make purchases of certain steel warehouse products.

The Steel Warehouse Order M-21-b provides an A-9 priority rating to the warehouseman for delivery within quota limitations of such items as bale tires, nails, welding rods (uncoated), woven wire, poultry netting, barbed wire, staples, concrete reinforcing bars, pipes and tubes, and galvanized sheets. The quota limitations on deliveries to a warehouse of these items are based on the 1940 shipments. Farmers will not be able to get all of these products they desire, and if the local merchant or warehouseman has exhausted his quota under the order he will not be able to replenish his stock until his next quota is due.

TYPEWRITERS: The WPB instituted a program to produce 325,000 standard and 75,000 portable typewriters during the remainder of 1942; the Army and Navy to receive about 88 percent of the portable machines and approximately 68 percent of standard machines. The remainder will be rationed to other Government agencies. OPA will ration stocks of new machines now held by dealers; civilian users must obtain typewriters through OPA. WPB also set up a production schedule for March 15 through June to regulate production to meet essential requirements and to allow conversion of a large part of the industry's facilities to ordnance production. WPB Chairman Nelson authorized the Director of Industry Operations to delegate the Board's rationing authority to OPA whenever such action is desirable.

GASOLINE AND PETROLEUM: Oil Coordinator Ickes announced a card rationing system for gasoline will replace the present 20 percent limitation on deliveries in 17 Eastern States, Washington, Oregon, and the District of Columbia within six weeks. Mr. Ickes said OPA will formulate the system, and cards will probably be issued on a time-period basis to prevent hoarding. Joel Dean, OPA Price Executive, was named Chief of OPA gasoline rationing.

Tank car movement of petroleum to the East coast surpassed hopes, Petroleum Coordinator Ickes said, but the record car movement of the week ended March 7 (435,086 barrels daily) represented only 25 percent of wartime requirements. He said the East coast petroleum industry has recommended: Immediate action to reduce by 25 percent deliveries to filling stations; and transfer of tank cars from the Midwest and Southwest districts. Mr. Ickes also asked major coal consumers to build up stockpiles during the summer to avert possible shortages next fall.

The OPA set price ceilings on GASOLINE at service stations in 17 Eastern States, Oregon, Washington, and the District of Columbia, effective March 23, at levels prevailing March 13.

"SECRETARY OF AGRICULTURE MEMORANDUM NO. 986 SAYS: 1. The Bureau of Animal Industry, the Bureau of Dairy Industry, the Bureau of Plant Industry, the Bureau of Agricultural Chemistry and Engineering, the Bureau of Entomology and Plant Quarantine, the Bureau of Home Economics, the Office of Experiment Stations, and the Beltsville Research Center, which now form the Agricultural Research Administration pursuant to Executive Order No. 9069, are established and continued under the same respective designations as agencies of the Agricultural Research Administration.

2. Each of the agencies of the Agricultural Research Administration shall have the same functions, personnel, positions, property, and records that constituted the agency of the same designation prior to the issuance of the Executive order, except that:

- (a) the activities of each of the agencies shall be subject to the direction and supervision of the Administrator of the Agricultural Research Administration;
- (b) the Administrator may transfer to his immediate office from any agency such personnel, property, and records as he may require for the proper discharge of his duties;
- (c) the Administrator may take such action as he deems to be appropriate with respect to consolidating or integrating the work of the several divisions, sections, and units which are engaged in the performance of business, personnel, information, administrative, or other facilitating services; and
- (d) the Administrator may take such action as he feels advisable with respect to integrating or consolidating the research of the several bureaus, divisions, sections, and units in order to promote economy and efficiency and to concentrate the Department's research efforts on problems that are most vital to the production and utilization of agricultural commodities.

3. The Administrator of the Agricultural Research Administration may delegate to other officials or employees of the Administration or of the several agencies which constitute the Administration any of the authority now or hereafter conferred upon the Administrator." (Summary from Daily Digest Mar. 12, '42.)

USE OF OILS WITH HIGH LAURIC ACID CONTENT CURBED: Use of cocoanut oil, babassu oil, palm kernel oil and other oils with a high lauric acid content has been restricted by General Preference Order M-60, issued March 20 by the Director of Industry Operations.

Because these oils provide a high yield of glycerine, which is needed for war purposes, the order prohibits any use of such oils which does not produce glycerine, or in which the amount of glycerine remaining in the product exceeds 1.5 percent on an anhydrous soap basis.

MOBILIZATION OF FARM LABOR: The Secretary of Agriculture announced a program to aid mobilization of farm labor manpower through registration of farm men, women, and youth; use of qualified persons on NYA and WPA projects; use of town people for peak seasonal operations; training for farm labor; and registration of labor requirements of all farmers.

APR 21 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

ENTOMOLOGISTS IN MILITARY SERVICE: A number of entomologists have received commissions in the Sanitary Corps of the Army and the Hospital Corps Volunteer Service of the Navy. Some of these men were reserve officers in the Army and, upon being called for duty, were assigned to entomological work in the Sanitary Corps. Some entomologists who have been drafted have also been assigned to entomological duties.

The Army and Navy have set up certain requirements for a commission in entomological work: (1) A Bachelor's Degree in entomology; (2) four years of actual experience in the field of medical entomology; (3) an M. S. in medical entomology may be substituted for 1½ years of the above experience; (4) a Doctorate in medical entomology may be substituted for three of the four years of experience; (5) no military experience is required.

Those about to be inducted into the service by draft or through volunteering, who wish to get assignments in the biological field, may request a classification card from the Director of Enrollment, Medical Technologists, American Red Cross, Washington, D. C. If the qualifications are approved by the Red Cross, the applicants are automatically assigned to the Medical Department and subsequently they may be drawn from replacement centers for duty in fields relating to medicine, including entomology.

ALLOCATIONS AND WPB ACTIONS: The first of a periodic series of provisional reports issued by the War Production Board on the relative scarcity of certain materials includes a number of materials used in the manufacture of insecticides. The first group lists those materials that generally are critically essential for the prosecution of the war and includes the following materials which enter into the manufacture of insecticides: Copper, Copper scrap, Lead, Chlorinated hydrocarbon refrigerants (this includes Freon), Chlorinated hydrocarbon solvents (this includes ethylene dichloride), Chlorine, Diphenylamine, Formaldehyde, Phenols, and Cashew nut shell oil (this is used in making Cardolite, which is used in dissolving rotenone in mineral oils).

The second group lists materials also necessary for war production and essential industrial activity, but the supply of which is not so tight. In this group are included the following materials of insecticidal interest: Antimony (a constituent of tartar emetic), Arsenic, Barium carbonate, Borax, Carbon tetrachloride, Casein, Cryolite, Molasses, Mercury, Sugar, and Zinc.

MOLASSES--GENERAL PREFERENCE ORDER NO. M-54, AS AMENDED MARCH 27, 1942: The amended preference order for molasses, which became effective March 27, 1942, permits unrestricted delivery for use in the manufacture of insecticides in amounts equal to those used during the corresponding quarter of 1941. It reads in parts as follows: *** (8) "Class 1 Purchaser" means any person who requires molasses in the manufacture of any one or more of the following products: (i) Insecticides, Lactic Acid, Graphite Paste, Printing Rollers, Dye Stuffs, Ink, Ephedrine, Sugar for Human Consumption (Produced from Beet Molasses), Denatured Rum for Flavoring, etc. ?

*** (i) Class 1 Purchaser--during any Calendar Quarter, 100% of a Calendar Quarterly Supply.***

PRICE CEILINGS: Price-control measures of interest to USDA workers and farmers recently taken by OPA include action to hold down prices of fertilizer on all sales down to a minimum of 250 lbs.; farm machinery and parts; used egg cases; most canned fruits and vegetables (but not retail sales); dressed hogs and wholesale pork cuts; mercurial compounds (germicides and insecticides); domestic shorn wool (on a clean basis only, not grease wool at the farm). State and county USDA War Boards have the details in each case.

HONEY: WPB has issued an order (M-118, effective March 26, 1942) limiting the amount of honey which may be used in such manufactured products as ice cream, candy, soft drinks, bakery goods and medicines... The purpose is to save present stocks of honey for households and the boys at the fronts.

CONSERVATION ORDER ON ROTENONE: War Production Board Order M-133 effective April 13, 1942, provides for conservation of supplies of rotenone by restricting its use to preparation used by the Army and Navy and for the protection of certain food crops. The order reads in part as follows:

"§ 1189.1 Conservation Order M-133--(a) Definitions. (1) 'Rotenone' means the chemical compound of that name derived from timbo, barbasco, cube or derris root, whether in the form of powder, dust or liquid extract.

"(2) 'Dealer' means any person, including an importer, manufacturer and farmer's cooperative, selling rotenone or offering rotenone for sale.

"(b) Restrictions on use. Except as specifically authorized by the Director of Industry Operations, no person shall hereafter use rotenone or any product containing rotenone except for one or more of the following purposes:

"(1) Use by the Army or the Navy as a delousing agent, or the manufacture of any preparation for such use by the Army or the Navy;

"(2) Use in the protection of food crops other than cotton, tobacco, cranberries, eggplant, cucurbits, onions, peppers and sweet corn, or the manufacture of any preparation for such use;

Provided, however, That this Order shall not be construed to prevent the use by any person of any product containing rotenone for a purpose other than those uses specifically authorized by this paragraph (b) of this section where such product was manufactured or prepared prior to the effective date of this Order.

"(c) Restrictions on delivery. No person shall sell or deliver rotenone or any product containing rotenone if he knows or has reason to believe that it is to be used for a use not permitted by paragraph (b) hereof.

"(d) Restrictions on processing. No person using rotenone in the manufacture of any spray, dust, powder or other preparation intended for a use permitted by this Order shall put in process or use rotenone in such manufacture at a rate greater than is necessary to permit him to meet required deliveries of his finished products and to maintain a practicable minimum working inventory of such finished products."

EMERGENCY MEASURES TO CONSERVE TIRES AND AUTOMOBILES: Secretary Wickard, in Memorandum No. 996, says: "I cannot overstate the serious necessity for conserving every automobile, truck, and rubber tire which the Department now possesses. The plain truth is that so far as can now be seen replacements of such automotive equipment and tires are not likely to be possible for a long time to come. The prohibitions as applied to civilian operations are likely to become even more stringent, as evidenced by the recent recommendations of the House sub-committee on War Department Appropriations which would bar the procurement of any passenger cars by any Federal agency (except the White House) without the special approval of the Secretaries of War and Navy. Moreover it is exceedingly improbable that retreaded or recapped tires will be available to the Department."

May 16, 1942

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

CALCIUM ARSENATE SITUATION IN THE COTTON SOUTH: The following information sent, on May 13, 1942, to an insecticide supply house in the South by P. H. Groggins, Chief of the Chemicals Division, Office of Agricultural War Relations is of special interest to entomologists:

"We submit below, an excerpt from a recent letter which we have sent to the Agricultural Insecticide and Fungicide Association:

'In order that we may advise the USDA War Boards, and others interested in the distribution of arsenicals to the South, we are requesting that your office take steps to provide for the distribution and release to farmers of calcium arsenate in accordance with the following schedule: May 1, 30%; June 1, 43%; July 1, 58%; August 1, 30%; September 1, 100%. This equals approximately 50,000,000 pounds.'

"In connection with such distribution it is to be emphasized that the calcium arsenate is to be distributed through customary channels. Our objective is to get the insecticide to the farmer who needs it. It is our conviction that more calcium arsenate than ever will be available but we cannot guarantee that this will be sufficient to meet the demand in the light of the present prices for cotton.

"* * * It is important to emphasize that allocations can only be made on the basis of previous purchases unless emergency action in the national interest is at stake."

CHLORINATED HYDROCARBON SOLVENTS: The use of chlorinated hydrocarbon solvents for the fumigation of stored products, including grain, is given a high preference rating. General Preference Order M-41 as amended May 2, 1942 and effective on that date, defines chlorinated hydrocarbon solvents as follows: "Chlorinated hydrocarbon solvents means: (i) Carbon tetrachloride, (ii) Trichlorethylene, (iii) Perchlorethylene, (iv) Ethylene Dichloride, and includes mixtures containing the foregoing, provided said mixtures are suitable for any of the uses hereinafter in paragraph (c) specified."

The use of these materials for "Plant control laboratories, hospitals, educational institutions and public institutions, for own consumption" is also given a preference rating of A-10.

Other than the above, the use of these materials for insect control is not covered in this order.

FARM EQUIPMENT INDUSTRY GETS A-1-A PRIORITY RATING: Implement & Tractor, April 25: An A-1-A preference rating, the same given on army and navy contracts, was granted manufacturers of certain types of farm equipment last week in an effort to speed production on machinery needed by farmers. The implement and tractor industry previously operated under an A-3 rating. The revised rating was ordered by the War Production Board to give the farm machinery makers materials which could not be obtained with sufficient speed under A-3. The A-1-A rating will be available until June 30. The rating may be applied only to the manufacture of specified equipment, attachments and repair parts as follows: planting, seeding and fertilizing machinery; plows and listers; harrows, rollers, pulverizers and stock cutters; cultivators and weeder; harvesting machinery; wagons and trucks; complete spraying outfits; farm elevators; poultry farm equipment, tractors, and miscellaneous farm machines and equipment.

HONEY--AMENDMENT TO NO. 1 TO GENERAL PREFERENCE ORDER NO. M-118: Paragraph (c) (3) of § 1150.1, General Preference Order No. M-118, is hereby amended to read as follows:

(3) Notwithstanding the restrictions of paragraph (c) (2), any person may use, in the manufacture of other products, a total of not more than sixty (60) pounds of honey in any month of 1942. (P.D. Reg. 1, as amended, 6 F.R. 6680; W.P.B. Reg. 1, 7 F.R. 561, E.O. 9024, 7 F.R. 329; E.O. 9040, 7 F.R. 527; sec. 2 (a), Pub. Law 671, 76th Cong., as amended by Pub. Law 89, 77th Cong.)

This amendment shall take effect immediately. Issued this 17th day of April 1942.
J. S. Knowlson, Director of Industry Operations.

MODIFICATIONS IN PEA WEEVIL CONTROL RECOMMENDATIONS FOR SEED PEAS IN 1942: Certain economies may be effected in the pea weevil control program on seed peas based on results of experimental work of the Bureau in cooperation with the Washington Agricultural Experiment Station. There are no changes in recommendations on canning and freezing peas. In order to meet production goals, growers of seed peas should make every effort to put into effect the following suggestions for pea weevil control:

1. Reduce the rate of application of dust mixtures containing 1 percent rotenone from 20 pounds to 10 pounds per acre.

2. Reduce the rate of application of dust mixtures containing 0.75 percent rotenone from 20 pounds to 15 pounds per acre.

3. Where possible, that is where contracted seed crops are not involved, the use of border trap strips for concentrating weevil populations where they can be killed by dusting is suggested. It is advisable to dust border trap strips, or any other areas where the weevils are concentrated in large numbers, with 15 pounds of a dust mixture containing 1 percent rotenone or 20 pounds of a mixture containing 0.75 percent rotenone.

4. Sample the field with an insect collecting net. Dust only those areas found infested with pea weevils. The probable degree of infestation at harvest may be determined by effective sweeping as the field comes into bloom. Three to five percent infested seed at harvest may be expected from each weevil found in 25 sweeps of the net.

Therefore, each field should be swept so that the infested areas can be accurately diagramed and treated.

5. Effective control can be best obtained when equipment is in good condition. Therefore, care should be taken in the maintenance of the dusting equipment. Flexible tubing cannot be obtained. Its life may be prolonged by rotating the tubing at periodic intervals and by alternating the position of the tubes. If they show signs of extreme wear at one end, they can be changed end for end. The regulation of the flow of dust from the machine hopper must be carefully adjusted when applications of dust as light as ten pounds per acre are to be made in order to secure uniform kills.

SUGAR NOW AVAILABLE FOR CITRUS THRIPS CONTROL: Fifty tons of sugar for use with tartar emetic against citrus thrips in California during the present season have been made available to citrus growers by the Sugar Section of the War Production Board, according to Director W. J. Cecil of the California Department of Agriculture. This allocation represents approximately 80 percent of the estimated use in thrips control last season. The War Production Board has very properly placed the handling of this sugar in the hands of Director Cecil, which will assure its prompt and equitable distribution in the areas where needed and confine its use strictly to the control of the citrus pest. In fact, already the machinery has been set up in the various citrus counties where thrips control is important through coordinated arrangements with the county agricultural commissioners.

SULFUR—GENERAL INVENTORY ORDER M-132: § 1186.1 General Inventory Order M-132--(a) Exception to general inventory restrictions. Notwithstanding the provisions of any regulation

or order heretofore issued by the Director of Priorities of the Office of Production Management or by the Director of Industry Operations of the War Production Board, or any other regulation or order which may hereafter be issued but which does not expressly relate to sulfur, any primary producer may make deliveries of sulfur, and any person may accept deliveries of sulfur from a primary producer, although the inventory of sulfur in the hands of the person accepting such delivery is, or will by virtue of such acceptance become, in excess of a practicable working minimum.

(b) Applicability of Priorities Regulation No. 1. Except to the extent that the provisions of paragraph (a) are inconsistent therewith, all transactions involving sulfur shall be subject to the provisions of Priorities Regulation No. 1 (Part 944), as amended from time to time.

(c) Definitions. "Primary producer" means a person who mines sulfur.

SILK AND SILK PRODUCTS--MAXIMUM PRICES FOR SILK WASTE--(a) Imported silk waste. The maximum prices established herein are applicable to all imported silk waste which arrived in the United States prior to February 28, 1942, but are not applicable to imported silk waste arriving in the United States on or after that date.

<u>Imported silk waste</u>	<u>Maximum price per pound</u>
Canton Open Waste-----	\$0.64 ex seller's warehouse
China Long Waste-----	\$0.92 ex seller's warehouse
Pierced Cocoons-----	\$0.85 ex seller's warehouse
Poignees -----	\$1.85 in bond, warehouse, Port of New York.

(b) Domestic silk waste.

<u>Domestic silk waste</u>	<u>Maximum price per pound, f.o.b. shipping point</u>
Winders Waste (untwisted):	
Untinted -----	\$0.90
Tinted-----	.85
Tram Waste (1-5 turns per inch)	.80
Crepe or Grenadine Waste (6 or more turns per inch)-----	.22
Cut Skeins-----	.95

Issued this 20th day of April 1942.

LEON HENDERSON, Administrator.

SHELLAC: Conservation Order M-106, issued April 14, 1942 and immediately effective, defines the uses, and sets forth inventory and purchase requirements for shellac which is defined as follows: (1) "Shellac" means lac of all grades produced from the secretions of *tachardia lacca*, including seedlac, but not including such lac which has been bleached, cut or incorporated in protective or technical coatings."

The amount available for research is unrestricted within the following limits:

"(x) Scientific research by any research or control laboratory, where the aggregate amount of shellac consumed by such laboratory during the calendar year shall not exceed one hundred sixty-five (165) pounds;"

COPPER INSECT SCREEN: (Amendment to Conservation Order M-9-C as amended December 10, 1941, curtailing the Use of Copper in Certain Items)

Section 933.4 (Conservation Order M-9-c) is hereby amended by adding at the end of paragraph (d) the following:

On and after April 9, 1942, no person shall deliver, install or cut any copper or copper base alloy insect screening (1) unless such screening is to be delivered to, installed for or cut on the order of the Army or Navy of the United States, the United States Maritime Commission, the Panama Canal, the Coast Guard, any foreign country pursuant to the Act

of March 11, 1941 entitled "An Act to Promote the Defense of the United States" (Lend-Lease Act), or Defense Supplies Corporation, Metals Reserve Corporation or any other corporation organized under section 5 (d) of the Reconstruction Finance Corporation Act as amended or any person acting as agent of any such corporation, or (2) unless such delivery, installation or cutting shall be with the specific authorization of the Director of Industry Operations. The foregoing shall not apply to used or second hand insect screening or to insect screening in rolls partly used on the 9th day of April, 1942 . . . This amendment shall take effect immediately. Issued this 9th day of April 1942.
J. S. KNOWLSON, Director of Industry Operations.

ENROLLMENT OF MEDICAL ENTOMOLOGISTS: The War Letter of April 21, 1942 discussed procedures which might be followed by entomologists about to be inducted into service or who through volunteering might wish to get assignments in the biological field. The experience of an entomologist in Colorado in following the suggested procedure is reported in the reply he received from the Director of Enrollment of Medical Technologists. The reply is quoted below:

"This will acknowledge your letter of April 28th concerning our enrollment of medical technologists.

"We were requested by the Surgeon General of the Army to initiate the enrollment in order to have a list of qualified technicians who would be available for duty with the Medical Department of the Army. The enclosed statement for enrollments of each group listed have been established by the Surgeon General's Office. Entomologists are not included in the groups being enrolled for service with the Medical Department.

"We appreciate your interest and regret that we cannot be of assistance to you."

It is informally understood that the Medical Corps of the Army has under consideration the issuance of a statement which will broaden the classification field of technologists desired and that this may include entomologists or at least those trained in biology.

WAR CAUSES SHORTAGE IN CHEMICALS FOR INSECTICIDES: Science Service release, March 24: Munitions for warfare against insects and plant diseases are scarce because of the war, it was reported at the Eighth Annual Chemurgic Conference. About half of the arsenic used in this country comes in normal times from abroad, mainly Sweden, Belgium, and Japan. At the same time, other industries are demanding larger shares of the arsenic still available. Great quantities are needed in manufacture of khaki cloth, blankets, and glass-making, and for chemical weed killers, to replace chlorates now absorbed by powder mills. Rotenone used to come largely from the East Indies. South American rotenone, which used to supply about 40% of the nation's normal requirements, can be stepped up to perhaps 60%, but not more. The principal source of pyrethrum used to be Japan, but the entire requirements for 1942 can be supplied from Kenya, if enough shipping space can be made available. Arsenic and rotenone are being saved largely through careful distribution of available supplies. Non-essentials, like grub-proofing of lawns and golf greens and protection of ornamentals, are being put on short rations, and supplies on hand are being directed to combating pests and diseases attacking principal food and fiber crops.

MAY 25 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

DELIVERY OF ARSENIC CONTROLLED: General Preference Order M-152 issued May 22, 1942, places controls on the delivery of arsenic. This is of especial importance because of its relation to the manufacture of insecticides containing arsenic, except from supplies of arsenic already delivered. The order reads in parts as follows:

"1229.1 * * * (a) Definitions. (1) Arsenic means arsenious acid, also known as white arsenic and arsenic trioxide, whether in crude (black or gray) or refined form. The term does not include any chemical derivative or chemical compound of arsenious acid; * * *

"(b) Restrictions on deliveries. (1) No producer or distributor shall make delivery of arsenic to any person unless and until he shall have been authorized to do so by the Director of Industry Operations. At the beginning of each calendar quarter, commencing with the third quarter of 1942, the Director of Industry Operations will issue to all producers and, directly or indirectly, to all distributors specific authorizations or directions covering deliveries of arsenic which may or must be made by such producers or distributors during such quarter. In addition, such Director may issue during any quarter (including the balance of the second quarter of 1942) such authorizations or directions concerning deliveries as he may deem appropriate or necessary, and he may also issue directions respecting the use or uses to which the arsenic whose delivery is authorized hereunder may be put. Authorizations or directions shall be based primarily upon insuring the satisfaction of all defense requirements and, insofar as possible, providing an adequate supply for essential civilian uses. Each producer and each distributor of arsenic, upon being informed, directly or indirectly, by such Director of the deliveries which such Director has authorized, shall forthwith notify his customers of the extent of such authorization as the same may affect them. * * *

"(d) Reports. Every person who during any calendar quarter of 1941 used 500 lbs. or more of arsenic shall, on or before June 1, 1942, file with the Chemicals Branch of the War Production Board, Form PD-492, properly executed, showing among other things his inventory of arsenic as of the close of business on the day prior to the date of issuance of this order. In addition, all persons shall file such other reports as may from time to time be directed by the Director of Industry Operations.

"(e) Inventory restrictions. No producer or distributor shall knowingly make, and no person shall accept deliveries of arsenic if the inventory of arsenic of the person accepting delivery is, or will by virtue of such acceptance become, in excess of a ninety-day supply thereof having regard to current permissible use or sale, but this paragraph shall not be construed to prevent a person's accepting delivery thereof in the smallest practical delivery unit thereof in the smallest practical delivery unit as evidenced by his past experience. * * *

"(5) Applicability of priorities regulation No. 1. This order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1 (Part 944), as amended from time to time, except to the extent that any provision hereof may be inconsistent therewith, in which case the provisions of this order shall govern." * * *

It is planned to distribute the full text of this order as soon as copies are available.

RETAIL PRICES OF AGRICULTURAL INSECTICIDES AND FUNGICIDES: Maximum Price Regulation No. 144, issued by the Office of Price Administration on May 16, 1942, and effective May 18, 1942, establishes the maximum price for the retail sale of agricultural insecticides and fungicides. The order reads in part as follows:

"1372.51 Prohibition against dealing in agricultural insecticides and fungicides at retail prices above the maximum. (a) On and after May 18, 1942, regardless of any contract or other obligation, no person shall sell or deliver at retail any agricultural insecticide or fungicide at a price higher than the maximum price established by this Regulation.

"(b) No person in the course of trade or business shall buy or receive any such commodity at a price higher than the maximum price established by this Regulation. * * *

"1372.52 * * * (a) In those cases where the seller dealt in the same or similar commodities during the twelve-month period ending March 31, 1942:

"(1) Sales by persons other than manufacturers. (i) The seller shall select from said period, the calendar month during which he delivered the largest amount of such commodity being priced under this regulation, and shall determine his average dollar and cent margin obtained above cost for like units of such commodity delivered to purchasers of the same class during such one month period; * * *

"(iii) The seller of the commodity being priced hereunder shall add to the replacement cost price thereof, the margin computed under subparagraphs (1) (i) or (1) (ii) above as the case may be, and the result shall be the maximum price of the commodity being priced.

"(2) Sales by manufacturers. (i) The seller shall select from said year period the one calendar month during which he delivered to a purchaser of the same class, the largest amount of such commodity being priced under this Regulation, and shall determine his average dollar and cent margin obtained above cost of raw materials and containers for the like units of such commodity delivered to such purchasers during such one month period. * * *

"(iii) The seller of the commodity being priced hereunder, shall add to the replacement cost price of the raw material and containers thereof, the margin computed under subparagraph (2) (i) or (2) (ii) of this paragraph, as the case may be, and the result shall be the maximum price of the commodity being priced.

"(3) In determining maximum prices under the above provisions of this Section, there may be added to such maximum prices the amount of any increase in transportation charges incurred by the seller after the last day of the calendar month in which the seller delivered the largest amount of the commodity being priced in the twelve-month period ending March 31, 1942, and prior to March 31, 1942, in connection with the sale to a purchaser of the same class."

It is planned to distribute the full text of this order as soon as supplies are available.

POSSIBLE OUTBREAK OF TRUE ARMYWORM: The Bureau has forwarded the following to the Office of Agricultural War Relations to aid them in advising the War Production Board on need for insecticides:

"As a collaborator of the Insect Pest Survey of the Bureau, W. J. Baerg, of the University of Arkansas, reported on May 20, 1942, that:

"An outbreak of the true armyworm appears to be developing in southeastern Arkansas.

The standard recommendation for the control of this pest, which causes important losses to food and forage crops, is the use of a poison bait. The insecticidal ingredient of the bait is liquid sodium arsenite or white arsenic. If the outbreak develops and conditions are favorable for the development of the pest, it may become an important factor over a wide area extending as far north as southern Canada."

Although no tests of sodium fluosilicate as a substitute for the arsenical in armyworm bait have been reported, the excellent results obtained with this poison when used in similar bait for closely related cutworms is considered a strong indication that it could be used satisfactorily if necessary. In the event of an outbreak the feasibility of using sodium fluosilicate instead of an arsenical in the bait could be quickly determined by actual trial.

USE OF ROTENONE DUSTS ON AUSTRIAN PEAS: The following extracts are from a letter of May 21, 1942, sent by the Chief of the Chemicals Division of Agricultural War Relations to the War Production Board. These are of interest and significance because of the particular problem, the general policy outlined, and the emphasis on the need to conserve supplies for 1943.

"This office is of the opinion that our limited supplies of rotenone should be used on seed legumes only when they are comingled or intermingled with peas or beans grown for canning or direct use. Depriving farmers of rotenone for this purpose would jeopardize the adjacent food crops. This would be contrary to the Spirit of the Rotenone Conservation order, M-133, and for this reason we have recommended that the order be interpreted or amended accordingly.

"When legumes such as Austrian peas are grown for seed it is suggested that calcium arsenate should be used for aphid or other insect control. It is further suggested that the arsenate for this purpose shall not come out of supplies intended for the Cotton South. It is recognized that arsenicals are only about half as efficient as rotenone but the fact remains that we do have some arsenic and practically no rotenone.

"It is to be emphasized that we started this fertilizer year with about 3,000,000 pounds of 5 percent rotenone roots and will have virtually no carry-over. We would be remiss in our obligations if we recommended, or permitted exhaustion of our supplies on non-vital food uses this year and were then confronted with problems of protecting food crops next year.

" * * * Even if pending negotiations are successful, we are still confronted with the unpleasant realization that our supplies next year will be substantially less than we had this year."

CURRENT OUTLOOK ON SUPPLIES OF CERTAIN INSECTICIDES: Under date of May 13, 1942, the Director of Office of Agricultural Defense Relations supplied the following:

"Copper compounds.--The administrator of the Copper Order is sympathetic to our needs and in all probability supplies of copper compounds will be adequate. The situation with respect to copper sulfate is good.

"Arsenicals.--The national production of white arsenic is insufficient to meet all demands. However, the War Production Board recognizes the importance of these insecticides to agriculture and arrangements are being made for the production of 65 million pounds of lead arsenate and 45 million pounds of calcium arsenate. Indicative of the fine cooperation of War agencies is the plan to take care of the War Department's needs for arsenic by the opening of new mines at government expense.

"Pyrethrum.--Until the British took over Madagascar our supplies of pyrethrum, which came from Kenya, West Africa, were constantly endangered. It now appears that we can count on importations of about 20 million pounds annually. This quantity should suffice if army and navy needs for cantonments and air fields are not too great. In all probability, the minimum requirements of agriculture will have to be safeguarded by a conservation order."

Information from other sources indicate that there may be some interruption in the receipt of supplies of pyrethrum, even if shipping conditions are favorable, because of unfavorable conditions for the production of the flowers. This may have a temporary effect only but at a rather important time.

ODT BAN ON LAKE TRAFFIC FOR GRAIN EMPHASIZES FARM STORAGE: The need for additional farm storage has been emphasized further by an Office of Defense Transportation order which bans movement of grain over the Great Lakes, except by special permit. Purpose of this action is to free all boats possible for shipment of iron ore needed urgently in the manufacture of war equipment.

Roughly, about 160 million bushels of grain ordinarily moves to market via the Great Lakes route each season. Probably about 40 to 50 million bushels may still be moved on the Lake route in boats that cannot carry ore.

The ODT order will affect about 340 ships, with a gross carrying capacity of nearly 3 million tons. An unprecedented shipment of ore is expected for the season.

FARM EQUIPMENT AFFECTED BY WPB IRON AND STEEL ORDER: The War Production Board's order, issued May 1, which soon will stop the use of steel and iron in the manufacture of more than 400 items, affects a number of items widely used in agriculture.

Under this order manufacturers may deliver or accept delivery of iron and steel to be used in the manufacture of products listed in the order for 15 days. For 45 days they may process steel and iron for the manufacture of the affected items up to an average of 75 percent of the average monthly weight of all metals processed in 1941 in making each item. Then during the following 45 days the manufacturer may assemble the items listed. After that, all use of steel and iron in the manufacture of the articles named must cease. The order does not apply to screws, nails, rivets, bolts, strapping, and small hardware used for joining and other purposes.

Among the prohibited articles used widely on farms are: Baskets, except for commercial cooking and manufacturing uses; canopies, for electric brooders; cattle stanchions, except hangers and fasteners; chicken crates; chicken feeders; corn cribs; culverts; feed troughs; fence posts, except on A-2 or higher preference rating; fly traps; grain-storage bins, except strapping, hardware, and reinforcing materials; silos, except strapping and reinforcing and materials for maintenance and repair; tanks for dipping, watering, and feeding animals, strapping included; water-storage tanks, strapping excluded; wagon bodies, frames and wheels if constructed entirely of metal; wheelbarrows, except wheels; wire racks and baskets.

SILVER PINCH HITS FOR COPPER: Putting U. S. silver supplies to work for the United Nations may be true literally as well as figuratively. With copper a critical metal, plant pathologists of Cornell University and the U. S. Department of Agriculture co-operating are experimenting with silver sprays to replace the familiar Bordeaux mixture that calls for copper.

Already on record are results of experiments started in 1938 to compare the silver and copper sprays. A spray of silver nitrate and lauryl sulphate proved approximately as effective as Bordeaux in the control of late blight of celery. None of the silver sprays tested was nearly as effective as Bordeaux in combatting late blight of potatoes. Limited tests on tulip "fire" showed silver sprays were as good as Bordeaux and did not leave an objectionable residue or injure the foliage as severely.

Silver sprays on the basis of 1938 prices were somewhat more costly than Bordeaux--but less than twice as expensive. Since copper is required for more necessary uses, the work is being continued and further tests of silver sprays as fungicides are being made to see if they can replace part of the Bordeaux mixture that will be needed to protect food production.

DELIVERY OF NAPHTHALENE CONTROLLED: Conservation Order M-105, of the War Production Board, issued May 6, 1942, and effective immediately, places limitations on the delivery of naphthalene on and after June 1, 1942.

In the order the term "Naphthalene" means naphthalene in any form and from whatever source derived, and includes crude and refined naphthalene.

No producer or distributor shall, during any month, deliver naphthalene to any person and no person shall accept delivery of naphthalene, if delivery would be made in violation of the regulations laid down. Deliveries specifically authorized by the Director of Industry Operations provide that no person shall receive more than 250 pounds in any one month (less any quantities delivered to such person during such month and from any other source), provided that the aggregate of all deliveries hereunder in the case of a producer does not exceed 2 percent of his estimated production for such month. These restrictions do not apply to naphthalene if the transaction is the subject of a specific authorization.

Naphthalene packaged in units of not more than 250 pounds each and intended for sale or use as a moth preventative or insecticide are excluded.

PLANTS AND MALARIA CONTROL: Journal of American Medical Association, May 2: Plant scientists may aid in the control of malaria by determining the relation of each type of plant to anopheline propagation and by devising methods for holding objectionable species in check. An example of this type of work is described in a recent report on plant investigations carried on by the Tennessee Valley Authority during the summers of 1937 to 1940. One object of this study was to minimize the breeding of mosquitoes through proper preparation and maintenance of reservoirs. The study of obnoxious plants is fundamental to adequate maintenance of reservoirs and permits an intensive campaign to prevent or limit the colonization of certain critical species. The importance of aquatic and semiaquatic vegetation and of flotage in connection with the problem of malaria control in the Southeastern States has been emphasized. The attention being paid to this aspect of the problem by plant scientists constitutes a significant, albeit inconspicuous, service in the interest of public health.

INSECTICIDAL PLANTS IN THE AMERICAS: An article by this title, in the Bulletin of the Pan American Union, May, says: In the world-wide search for insecticides, men have found over 1,200 plants whose roots, leaves, flowers, wood, seeds, bark, or essential oils are said to be fatal to insects of one kind or another. The countries of the Western Hemisphere are the natural habitat of many of these insecticidal plants. The discovery, in recent years, of one plant after another that has commercial value suggests there must still remain in Latin America a significant number of insecticidal plants which are as yet unknown in commercial channels. The discovery of these plants, which is sure to come in time, will be vital to the agricultural programs of our American Republics.

Dear Sir,
I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the matter of the ...
and in reply to inform you that the same has been forwarded to the proper authorities for their consideration.

I am, Sir, very respectfully,
Your obedient servant,
J. H. ...

Very truly,
Yours,
J. H. ...

I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the matter of the ...
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J. H. ...

June 10, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

CONSERVATION ORDER ON ROTENONE AMENDED: Conservation Order M-133, which deals with the use of Rotenone, was modified by Amendment 1, issued June 6, 1942 and published on June 9, 1942. The amendment adds citrus fruits to the crops on which this material may not be used and authorizes its use as spray, wash, or dust in the treatment of cattle for destruction of grubs. The civilian use of rotenone as spray, wash, or dust to control mosquitoes, horn flies, stable flies, deer flies, lice, ticks, and similar insects is still prohibited except as specifically authorized by the Director of Industry Operations of the War Production Board. The amended order reads in part as follows:

"1. Present paragraph (b), subparagraph (2), is hereby amended to read as follows:

(2) Use in the protection of food crops other than citrus fruits, cotton, tobacco, cranberries, eggplant, cucurbits, onions, peppers, and sweet corn, or the manufacture of any preparation for such use;

"2. Present paragraph (b) is hereby amended to add the following subparagraph (3):

(3) Use as spray, wash, or dust, in the treatment of cattle for the destruction of grubs, but not including use as spray, wash, or dust for repelling and killing flies, mosquitoes, horn flies, stable flies, deer flies, lice, ticks, and similar insects."

ROTENONE FOR EXPERIMENTAL PURPOSES: The following is a quotation from a letter of May 22, 1942, from Melvin Goldberg, of the Chemical Branch, War Production Board, to P. H. Groggins of the Office for Agricultural War Relations relative to the provision of rotenone for experimental purposes:

"As you know, the order provides for the use of rotenone for delousing purposes for the armed forces and for the protection of certain food crops. If the experimental purposes are along the lines of research, pursuant to the provisions of this order, no further authorization is needed for its use from this office. However, in the event that the research is along lines prohibited by this order, we call your attention to (e)(3) which provides for an appeal on an individual basis. This appeal can be easily accomplished by means of a letter showing the amount of rotenone to be used, from whom it is to be purchased, how the material is used and other information deemed pertinent in a full consideration of the particular appeal. You may be assured that these requests will receive sympathetic consideration when the appeals are made."

MOLASSES ORDER AMENDED: A second amendment to General Preference Order M-54 governing molasses, issued May 25, 1942 and effective that date, provides for delivery to persons requiring its use for insect control. This amendment permits delivery on an

area rather than an individual basis on the basis of 100 percent of the calendar quarterly supply. The amendment reads in part as follows:

"(14) 'Class 7 Purchaser' means any person who requires molasses for sale directly (without the intervention of any other handler) to persons who require the same for ensilage, direct feed or insect control.

"(3) Deliveries by a Class 7 Purchaser (of molasses to which he is entitled pursuant to subparagraph (c)(1)(vii) hereof) to persons who require molasses for ensilage, direct feed or insect control."

PRICES FOR HOUSEHOLD INSECTICIDES: Amendment No. 1 to Maximum Price Regulation No. 142 for seasonal summer commodities, effective May 18, 1942, adds household insecticides to the list. This provides that a retailer in household insecticides in order to arrive at his ceiling prices is required to apply last season's percentage mark-up to a cost figure that cannot be more than the highest manufacture's price in March 1942 and may be less.

CERTAIN CARRIERS OF INSECTICIDES EXCEPTED FROM INVENTORY:

Restrictions: On June 1, 1942, and effective on that date, General Inventory Order M-161 was amended removing inventory restrictions on certain materials frequently used as carriers of insecticides. These include bentonite, diatomaceous earth, kaolin, and talc. The amendment says in part:

"Notwithstanding the provisions of any regulation or order heretofore issued by the Director of Priorities of the Office of Production Management or by the Director of Industry Operations of the War Production Board, or any other regulation or order which may hereafter be issued but which does not expressly relate to ... 'these materials' ... any person may make deliveries of such material, and any person may accept deliveries of such material from any other person, although the inventory of such material in the hands of the person accepting such delivery is, or will by virtue of such acceptance become, in excess of a practicable working minimum."

ARMY SPECIALIST CORPS: Regulations issued by the War Department concerning the establishment, objectives, administration, rates of pay, etc., of the Army Specialist Corps were published in the "Federal Register" for May 27, 1942, pages 3914-3922. These regulations are detailed and are not available to the Bureau for distribution. They form a special part, 79a, of Chapter VII - Personnel. Examples of the types of positions include "Medical science" and "Biology."

June 17, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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PYRETHRUM, DELIVERY AND USES CONTROLLED: General Preference Order M-179 of the War Production Board, issued June 13, 1942 and published June 16, 1942, places control on the delivery and use of pyrethrum. The order defines "pyrethrum" as follows:

"(1) 'Pyrethrum' means pyrethrum flowers and the powder, dust, or extract derived therefrom."

It defines "producer" as follows:

"(2) 'Producer' means any person engaged in the importation or sale of pyrethrum flowers or in the processing of pyrethrum flowers to make any powder, dust, extract, or other pyrethrum-containing material."

The order directs that no producer shall make delivery of pyrethrum to any person unless and until he shall have been authorized or directed to do so by the Division of Industry Operations of the War Production Board. It proscribes the form of a certificate to be filled out by the person purchasing or accepting delivery.

The order requires that prior to the beginning of each calendar month beginning with July 1942 the Director of Industry Operations of the War Production Board will issue to all producers specific authorizations or directions covering deliveries of pyrethrum. It provides that the Director of Industry Operations may issue during any month, including the balance of June 1942, authorizations or directions respecting the use or uses to which pyrethrum, the delivery of which is authorized, may be put. It requires that producers shall file with the Chemicals Branch of the War Production Board, Washington, D. C., on or before the 10th of each month beginning July 1942, a schedule of the deliveries he proposes to make during the succeeding month, together with the amount estimated to be available to him during such month. It provides that the producer shall not accept delivery of supplies which will build up an inventory in excess of a 30 days' supply.

This order is issued primarily to insure insofar as possible adequate supplies of pyrethrum for essential use in the war effort. Considerable quantities are required to protect military personnel from malaria-carrying mosquitoes.

It is proposed to distribute copies of this order when supply is made available.

IMPORTS OF SOME INSECTICIDAL MATERIALS CONTROLLED: Under an amendment of General Imports Order M-63 issued by the War Production Board on June 2, 1942 the imports of some materials used for, or in the manufacture of, insecticides will be controlled beginning July 2, 1942. The order groups the various materials covered into three lists. The restrictions and procedures required differ in the three lists, those in the third list being more exacting. The materials that may be used for, or in the manufacture of insecticides included in the order and the list in which they are included follows:

Antimony-----	List 2	Glue, animal and vegetable-----	List 3
Blood, dried-----	" 3	Gums and resins, natural-----	" 1
Bromine-----	" 3	Lead-----	" 1 & 2
Cashew nuts and oil-----	" 2	Mercury-----	" 1
Casein-----	" 3	Molasses-----	" 3
Copper-----	" 2	Rotenone-bearing roots-----	" 1
Cottonseed oil-----	" 1	Sesame seed-----	" 1

IMPORTS OF SOME MATERIALS COVERED BY PLANT QUARANTINES CONTROLLED BY GENERAL ORDER: An amendment of General Imports Order M-63 issued by the War Production Board on June 2, 1942 and effective July 2, 1942 places controls on certain plant materials the entry of which is governed by Plant Quarantines or Regulatory Orders. A simultaneously issued supplementary order, M-63-a, releases from the provisions of the general order commodities imported overland or by air from Canada and Mexico.

For the purpose of the order "import" is defined as follows:

"(4) 'Import' means to transport in any manner into the continental United States from any foreign country or from any territory or possession of the United States (including the Philippine Islands). Release from the bonded custody of the United States Bureau of Customs shall, for the purpose of this order, be deemed a transportation."

The order provides that after the date upon which any material is first made subject to this order no person, other than the Board of Economic Warfare, Commodity Credit Corporation, Metals Reserve Company, Defense Supplies Corporation, and any other United States governmental department, agency, or corporation, or any agency or corporation acting for them, shall import, receive, or offer to receive on consignment for import any material listed in the order only when authorized or otherwise directed in writing by the Director of Industry Operations of the War Production Board.

The materials covered by the order are divided into three lists. The restrictions and requirements governing approval for import differ under each list, those pertaining to List III being the most exacting. The materials the entry of which is at least in some cases governed by Plant Quarantines or Regulatory Orders and the list in which they are included follows:

Bananas-----	List 3	Garlic-----	List 3
Canary seed-----	" 3	Grapes-----	" 3
Corn-----	" 3	Lentils-----	" 3
Cracked corn-----	" 3	Lupines-----	" 3
Cotton linters-----	" 2 & 3	Melons-----	" 3
Cottonseed-----	" 3	Onions-----	" 3
Cotton, raw-----	" 3	Peaches-----	" 3
Cotton waste-----	" 3	Pears-----	" 3
		Peppers-----	" 3

IMPORTS OF CERTAIN INSECT PRODUCTS CONTROLLED: General Import Order M-63 as amended by the War Production Board on June 2, 1942 and effective July 2, 1942 controls the import of seed lac and beeswax.

General Import Order M-63 and its supplements and amendments has as its purpose the taking advantage of available shipping space by requiring that commodities be imported in the order of their importance to the war effort.

September 12, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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PREFERENCE ORDER ON MATERIALS ENTERING IN PRODUCTION OF INSECTICIDES REVOKED.

General Preference Order P-87, issued December 13, 1941, and governing materials entering into the production of insecticides, germicides, and fungicides was revoked in July 1942. The revocation of this order, which established preference ratings and provided that the materials should be used in connection with the production of food, relieved the situation in reference to insecticides needed to control pests in nurseries, on shade trees, and attacking hosts which were in themselves of direct or immediate use as food. This has a far-reaching effect and is indicative of the trend to treat particular problems separately and in relation to broader aspects essential to secure control of insect pests.

ENTOMOLOGISTS HELP IN THE DISTRIBUTION OF CALCIUM ARSENATE.---The demand for calcium arsenate for the control of cotton insects during this season presented many unusual conditions and problems. To aid the industry in supplying material where the need was the greatest and to have supplies available as needed, information on the status of insect infestations was made available to it weekly. This was assembled by the Bureau with the cooperation of State workers and forwarded through the Office for Agricultural War Relations. That Office has made the following comment in reference to this service:

"In looking back over the events of the past few months, it appears that the cooperation extended by the Bureau of Entomology and Plant Quarantine in supplying accurate information with respect to the cotton insect situation in the several States has been the outstanding accomplishment of our activities in the field of insecticides and fungicides. This cooperation has made possible the distribution of chemicals on a scientific and reasonably accurate basis and has eliminated the undesirable influences of pressure groups."

DIPHENYLAMINE FOR SCREWORM CONTROL.---Information supplied through many channels indicates that the amount of diphenylamine needed for the production of the screwworm remedy "Smear 62" has been adequate to meet demands and that sufficient quantities will be allocated to provide for anticipated needs for fall and winter treatment.

PLANT INSECTICIDES GIVEN FIRST RATING ON PRIORITY SHIPPING LIST.---General Import Order M-63 issued August 4, 1942 by War Production Board includes pyrethrum flowers and rotenone-bearing roots (specifically mentioning cube and timbo) on the first list of imported materials essential to the Nation's wartime economy. This assures high preferential treatment in the assignment of space on American-bound ships.

TOBACCO DIVERSION PROGRAM TO HELP SUPPLIES OF INSECTICIDES.--On August 15, 1942, the Secretary of Agriculture approved the diversion of 8,500,000 pounds of low-grade tobacco for use in the manufacture of nicotine sulphate and nicotine by-products. Nicotine sulphate for use on 1943 crops will be required not later than March 15. As supplies of tobacco from the 1942 flue-cured crop will not be available until January 15 provision is made for nicotine manufacturers to purchase supplies from existing stocks of tobacco. This action was taken to assure supplies of nicotine sulphate to substitute plant insecticides the supplies of which will be limited.

MEDICAL ENTOMOLOGISTS BEING ENROLLED BY THE RED CROSS.--At the request of the Office of The Surgeon General of the Army the Red Cross is enrolling individuals, subject to selective service, so they may be classified for duty with the Medical Department of the Army upon induction. Information in reference to such enrollment, together with the necessary enrollment blanks, can be secured from David H. Brown, Director Enrollment of Medical Technologists, National Headquarters, American Red Cross, Washington, D. C.

FEED BUSINESS RULED "ESSENTIAL." (American Miller, August) Key employees of the feed business will be entitled to deferred classification in the draft. This announcement was made by national headquarters of the Selective Service System on July 14. Feed men must establish that they are engaged in a business that is "Performing the service, governmental or private, directly concerned with providing food, clothing, shelter, health, safety, or other requisites of the civilian daily life in support of the war effort." Flour and other grain mill products, prepared feed for animals and poultry, starch, cereal, bakery products, etc., are among the food processing pursuits that are in the list of "essential" businesses.

COPPER CHEMICALS PLACED UNDER ALLOCATION.--General Preference Order M-227 issued September 9, 1942 by the Director General for Operations, War Production Board, effective October 1, 1942, places restrictions on delivery and use of copper chemicals. The order provides that producers and distributors apply for allocations of supplies needed, submit reports and meet other requirements. It provides small-order exemptions for deliveries by producers or distributors to any one person in any one month. The amounts for such deliveries are: 450 pounds or less of copper sulphate; 25 pounds or less of copper carbonate, copper chloride, copper oxide, copper nitrate, and copper cyanide. It includes provisions to specify the use for which the chemicals are intended. Among the uses are insecticides, fungicides, and mildew-proofing agents. This order was issued because of the shortage in the supply of copper chemicals for defense, for private account, and for export.

USES OF COPPER FURTHER CURTAILED.--Amendment 6 to Conservation Order M-9-c issued August 31, 1942 by the Director General for Operations, War Production Board, redefines the "Military Exemption List" for the uses of copper established May 7, 1942. Among the items included on the list for which copper may be used for military purposes is, "Insect screens and screening." Other amendments to the restrictive order on copper were issued on August 1, 3, and 7, 1942.

RELATIVE SCARCITY OF CERTAIN MATERIALS.--On August 21, 1942 the War Production Board issued the fifth provisional report on the relative scarcity of certain materials. Materials are listed in 3 groups ranked on availability of supplies.

Group I includes materials of which the supplies are inadequate for war and most essential uses. Included in this group are: copper, zinc, magnesium, arsenic trioxide, naphthalene and derivatives, phenol and derivatives, urea, burlap, rotenone, diphenylamine, pyrethrum, raw silk, and cashew nut shell oil.

Group II includes material essential to war industries but the supplies of which are not as limited as those in Group I. Included in this group are: antimony, mercury, acetic acid, bromine, chlorinated hydrocarbon solvents, chlorine, formaldehyde, xylol, cryolite and natural resins (except rosin).

Group III includes materials available in significant quantities as substitutes for scarcer materials. Included in this group are: lead, nicotine sulphate, sodium silico fluoride, bentonite, lime, petroleum products, and sawdust.

A supplementary list is added of certain materials on which restrictions of Priority Regulations have been released. These include: pyrophyllite and sulphur.

EXPORTATION OF COPPER SULPHATE PROHIBITED.--An order from the Export Control Branch of Office of Exports, Board of Economic Warfare, issued August 12, 1942 and effective August 15, 1942, prohibits the exportation of copper sulphate.

RESTRICTIONS PLACED ON USE AND DISTRIBUTION OF DRIED BLOOD.--General Preference Order M-192 issued August 7, 1942 by the Director General for Operations, War Production Board, effective September 1, 1942, places restrictions on the use and distribution of dried blood and blood adhesives. The order does not include the application of these materials in connection with insecticides among the specified uses.

SILK INCLUDED IN THE EMERGENCY SHIPPING PRIORITY LIST.--General Imports Order M-63 issued August 4, 1942 by the War Production Board places some 500 items of import from all parts of the world on an emergency shipping priorities list as vital to the Nation's wartime economy. The list separates the items into classes on the basis of their importance to the war effort. Among the items included on List II are: silk cocoons, raw including wild silk or tussah, noils, and waste.

FARM SERVICES THAT ARE EXEMPTED FROM PRICE CONTROL.--Several services of concern to farmers and entomologists are exempted by Federal price control under a revision of the Consumer Service Regulations recently announced by the Office of Price Administration. These include: dusting or spraying of trees, bushes or plants; disinfecting; exterminating; and fumigating, except the fumigating of feed, grain, and seeds.

MAXIMUM PRICES FIXED FOR FLUE-CURED TOBACCO.--Temporary Maximum Price Regulation No. 21 issued by the Price Administrator August 29, 1942 and effective on August 31, 1942 through October 29, 1942 (unless earlier revoked) establishes maximum prices for flue-cured tobacco (U. S. Types 11, 12, and 13). The prices established are those prevailing within five days of the issuance of the regulation. A minor correction in this order was published on September 9, 1942.

ALLOCATION OF CARBON TETRACHLORIDE.--General Preference Order M-41 dealing with chlorinated hydrocarbon solvents was amended August 1, 1942 by the Director General for Operations, War Production Board. This amendment authorized persons desiring delivery during the period August 1 to September 30, 1942 inclusive who had a preference rating of B-2 to receive not in excess of 100 percent of their average monthly consumption during the base period.

FARM MACHINERY ORDER IS REVOKED.---Because the assigned rating is no longer useful and most manufacturers are now operating under the production requirements plan, the WPB Director General for Operations has revoked Preference Rating Order P-95, which granted an A-3 rating to manufacturers of farm machinery and equipment.

Ratings assigned under P-95, however, may still be extended by suppliers whose deliveries have been rated under that order.

DEMAND FOR HONEY INCREASED.---A press statement issued by the Department of Agriculture August 22, 1942 points out that wartime sugar restrictions have greatly increased demand for honey as a sweetening ingredient. Prospective demand for honey will far exceed the recent average production of about 200 million pounds. Beekeepers have increased their colonies this year but they report that wet, cool weather has kept bees inactive during much of the spring and summer flowering season. Figures on 1942 honey production will not be available until September.

MAXIMUM PRICES ESTABLISHED FOR ACETONE.---Maximum Price Regulation No. 36 issued August 20, 1942 to be effective September 3, 1942 (the effective date was changed to October 3, 1942 by amendment issued September 2, 1942) by the Price Administrator establishes maximum prices for acetone for sale within the United States and for export. The price differs as to quantity and territory and ranges from 15.8 to 8.5 cents per pound. This important solvent has application to certain operations in the broad field of insect pest control.

CONSERVATION ORDER FOR SHELLAC AMENDED.---Conservation Order M-106 governing shellac, which is lac of all grades produced from secretions of Tachardia lacca, was amended July 31, 1942, by the Director General for Operations, War Production Board. The amendment adds restrictions on the use of this insect product.

MOLASSES ORDER AMENDED.---General Preference Order M-54 relating to molasses was amended September 1, 1942 by the Director General for Operations, War Production Board. This amendment changes periods of operations not of direct interest to entomologists. A new paragraph is added providing that prohibitions or requirements of the order do not apply to acceptance, delivery, or use outside continental United States.

PRICE REGULATIONS FOR SOFTWOOD LOGS ON WEST COAST AMENDED.---Amendment 2 of Maximum Price Regulations 161 issued September 3, 1942 to be effective September 9, 1942 establishes price schedules for various grades of Douglas fir, western red cedar, western hemlock, western white fir, noble fir, and Sitka spruce logs.

ORDER GOVERNING DELIVERY AND USE OF NAPHTHENIC ACID AND NAPHTHENATES AMENDED.---

General Preference Order M-142 governing the delivery and use of naphthenic acid and naphthenates was amended September 5, 1942 to be effective October 1, 1942. Producers and distributors desiring supplies are required to specify use for which they are desired. This order is of interest to entomologists because fungicides are included in the specified uses for naphthenic acid.

DELIVERY AND USE OF DICHLOROETHYL ETHER PLACED UNDER CONTROL.--General Preference Order M-226 issued by the Director General for Operations, War Production Board, on September 5, 1942 places restrictions on the use and delivery of dichloroethyl ether effective October 1, 1942. The order provides that producers and distributors shall not make deliveries and persons shall not accept delivery of dichloroethyl ether for uses other than those authorized by the Director General for Operations. It establishes requirements for reports, applications and procedures, including sending notices to customers. In seeking authorization for use producers and distributors shall specify the uses for which the allocation is sought. One of the recognized uses is the manufacture of insecticides.

September 16, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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RETAIL PRICES OF AGRICULTURAL INSECTICIDES.---Amendment 2 of Maximum Price Regulation 144 issued by the Price Administrator on September 12, 1942 and effective September 16, 1942 deals with the retail prices of agricultural insecticides and fungicides. Agricultural insecticides are defined to be all dusts, spray materials, fumigants, poison baits and like commodities used for the purpose of controlling insects on or in relation to all plants, trees, seeds, bulbs, crops, poultry, and farm animals. Agricultural fungicides are defined as all dusts, spray materials, fumigants, and like commodities used for the purpose of controlling fungous diseases of all plants, trees, seeds, bulbs, and crops. Nutritional sprays are also included. All attractants, spreading, and wetting agents, adhesives, diluents, and commodities of like character are defined as agricultural insecticides and fungicides, except those which are generally sold at retail for other purposes.

The maximum price to be charged by a seller for agricultural insecticides and fungicides is to be determined by adding to the maximum price charged to dealers under General Maximum Price Regulations the difference between such price and the price most frequently charged by the seller to the ultimate consumer during the calendar month in the twelve-month period ending March 31, 1942, in which he delivered the largest amount of the commodity to ultimate consumers. If the seller is unable to establish his maximum price because he made no deliveries during this period, or if he is unable to determine the month in which he made the largest deliveries or for other reasons, the procedure he should use is prescribed by the regulation.

This regulation does not apply to household insecticides which are covered by Maximum Price Regulation 142.

It is understood this amendment is primarily a change in operating procedure and will not have any material effect on the prices.

USE OF STEEL SHIPPING DRUMS RESTRICTED.---Limitation Order I-197 issued by the Director General for Operations, War Production Board, on September 14, 1942 limits the use of new and used steel drums for shipping. The dates when the order become effective are September 14, 1942 and November 13, 1942 (60 days after issuance of the order). The order provides that effective September 14, 1942 no drums shall be manufactured or the manufacture completed without having on the bottom plate thereof the letter X plainly and legibly embossed. All such drums, new and used, purchased or delivered on or after that date shall not be used to pack a wide variety of commodities, including: formaldehyde, liquid insecticides (including fly sprays), lime sulphur solution, paris green, pyrethrum concentrate, and rotenone.

The order provides that on and after 60 days after issuance of the order, November 13, 1942, no person shall use any drum, new or used, to pack any of a long list of products, including: aluminum sulphate, arsenic acid, solid; arsenic trioxide; arsenical mixtures; bordeaux mixture; calcium arsenate; chloride of lime; copper sulphate, basic and monohydrated; lime sulphur, dry; molasses; oil, crude; paradichlorobenzene; resins; shellac; sodium arsenate and sodium nitrate.

General exceptions provide that the order shall not apply to the use of drums for storage purposes by any person having less than 5 drums in use for all purposes. The Director General for Operations may make exceptions for certain specified war agencies of the government, including the Army, Navy, and Maritime Commission.

This is an important order and will affect the containers used for practically all agricultural and many household insecticides. It will, however, permit obtaining steel for shipping drums for nicotine sulphate, grain fumigants, and methyl bromide. The use of terneplate for containers of these commodities is now limited. For many insecticides, such as arsenicals and sulphur, it seems that paper will become the container adopted.

CONSERVATION ORDER ON CHEMICAL NITROGEN.--Conservation Order M-231, dealing with chemical fertilizers, issued September 12, 1942 by the Director General for Operations, War Production Board, effective on the same date, relates to chemical nitrogen. Among other things it provides schedules for various States. This is an important order on the conservation of fertilizers.

September 23, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

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CRYOLITE PLACED UNDER CONTROL.--General Preference Order M-198 issued September 18, 1942 by the Director General for Operations, War Production Board, places cryolite under control effective October 1, 1942. Cryolite is defined as the natural ore of sodium aluminum fluoride, any product refined from this ore, and all forms of synthetic cryolite.

The order provides that no person shall receive cryolite for use, except as an insecticide, unless the delivery and use is authorized by the Director General for Operations of the War Production Board. It provides that any producer who wishes cryolite for delivery for use as an insecticide shall secure authorization to do so from the Aluminum and Magnesium Branch of War Production Board for the quantity and grade of cryolite he proposes to deliver for such use.

The order in effect permits persons to receive cryolite for use as an insecticide without getting specific authorization but the producer of cryolite for use as an insecticide must secure allocation for the quantity and grade of cryolite he proposes to deliver to individuals or the retail trade for insecticidal use.

In the past considerable quantities of cryolite have been imported. This chemical is needed as a flux for the production of aluminum as well as for use as insecticides. During 1942 it is estimated that approximately 6 million pounds of cryolite were used as insecticides. The present indications are that similar agricultural use will be possible with the supplies of synthetic cryolite that will be available for 1943.

RATIONING OF FARM MACHINERY AND EQUIPMENT.--A temporary order providing for procedures for the sale of farm machinery and equipment and establishing a rationing system was issued by the Secretary of Agriculture September 15 to be effective September 17, 1942. Authority to ration farm machinery and equipment was delegated to the Department of Agriculture by the Office of Price Administration in an order effective September 16. Previous to that the War Production Board issued a directive authorizing the Office of Price Administration to ration machinery or redelegate the authority.

The temporary order divides farm machinery and equipment into three groups. The principal machinery and equipment used for insect control falls in the second group, Group B, which may be sold upon certification by the farmer to his dealer that the equipment is essential for current agricultural production needs. Among the items included in this group are spray outfits, spray pumps, and dusters of various kinds, ranging from power sprayers and dusters to hand sprayers and dusters. The temporary rationing plan does not apply to repair parts.

The order outlines conditions under which farm machinery and equipment may be purchased and sets up procedure and organization of rationing available supplies among farmers. At the National level the rationing program is under the direction of the Special War Board Assistant to the Secretary of Agriculture. The United States Department of Agriculture War Boards have an important part in carrying out this temporary order.

COTTON LEAFWORM INFESTATION.---The sudden outbreak of cotton leafworm in Texas, Arkansas, and Oklahoma, which spread rapidly to adjoining States, required the use of large quantities of calcium arsenate.

For the week ending August 28 the insecticide industry delivered the following amounts of calcium arsenate in States for use in combating this pest: Arkansas, 738,000 pounds; Oklahoma, 238,000 pounds; Tennessee, 600,000 pounds; Texas, 1,132,000 pounds. A total of 3,362,000 pounds of calcium arsenate was delivered to the States reporting the presence of cotton leafworm during the week of August 28. For the week ending September 4 total firm commitments were only 900,000 pounds.

PRICE SCHEDULES FOR ETHYL ALCOHOL AMENDED.---Amendments 2 and 3 to Price Schedule No. 28, issued by the Price Administrator on September 17, 1942, prescribe additional procedures in reference to determining the maximum prices that may be charged for ethyl alcohol for various uses. Amendment No. 2 gives in detail how raw materials used, direct labor cost, conversion cost, plant overhead, and general administrative cost may be used in figuring maximum prices.

DESIGNATION OF CALEXICO, CALIFORNIA, AS AIRPORT OF ENTRY REVOKED.---An order issued by the Acting Secretary of the Treasury September 17 and effective that date revokes the designation of the Calexico Municipal Airport, Calexico, California, as an airport of entry.

AIRPORT AT MIAMI REDESIGNATED AS AIRPORT OF ENTRY.---An order issued by the Acting Secretary of Treasury on September 17 and effective that date redesignates Chalks Flying Service Airport, Miami, Florida, as an airport of entry for one year.

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

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DELIVERY OF COPPER CHEMICALS FOR AGRICULTURAL USES.---Amendment 1 to General Preference Order M-227, issued September 24, 1942, by the Director General for Operations, War Production Board, modified the procedure to be followed in obtaining copper chemicals for use solely for the cultivation of agricultural crops. The order permits the delivery of any copper chemicals to any person for use, or for resale for use, for soil treatment or as an insecticide or fungicide, in connection with the cultivation of any agricultural crop. It provides that each person seeking delivery of any copper chemical shall, at the time of placing his order, file with his supplier a certificate to the effect that the copper chemical secured will be used, or sold for use, only for soil treatment or as an insecticide or fungicide, in connection with the cultivation of agricultural crops. No delivery of any copper chemical for use for such purposes shall be made unless a certificate has been executed by the receiver with respect to the use. This revision of the order does away with the filing of forms PD-600 by those who wish to use copper chemicals for soil treatment, insecticides, and fungicides, and substitutes therefor a simplified certificate which is to be executed by the buyer seeking copper chemicals for use in the cultivation of agricultural crops.

DISTRIBUTORS OF CHEMICALS LICENSED.---Uniform licensing and registration provisions for distributors of chemicals were written into 14 maximum price regulations and schedules by OPA.

This order, actually issued on August 6, made distributors of the products covered by these 14 schedules subject to licensing control, but excluded all retail sellers from its scope, leaving them subject to the licensing and registration provision of the General Maximum Price Regulation. The new amendments write these provisions into each of these schedules for informative purposes.

The provisions automatically grant a license as a condition of doing business. Courts may suspend the license of a person who, after a warning from OPA, violates a price regulation.

The amendments issued by the Administrator, Office of Price Administration, apply to schedules and regulations covering the following chemicals: formaldehyde, acetic acid, wood alcohol, glycerine, paraffin wax, oxalic acid, carbon tetrachloride, lithopone, titanium pigments, acetyl salicylic acid, salicylic acid, pine oil, cotton linters and hull fibers, and imported cresylic acid.

NATIONAL GOALS ARE SET FOR WINTER VEGETABLES.---In order that farmers who produce vegetables for marketing during the winter and early spring may shape their plans to make the greatest possible contribution to the wartime agricultural program this season, Secretary Wickard, Chairman of the Foods Requirements Committee, has announced 1943 goals for these crops. The goals are designed to bring about increases in production of vegetables of most value in the wartime diet and are aimed toward substantial shifts away from less essential crops. Winter vegetables covered in today's announcement are produced chiefly in ten States -- California, Texas, Florida, South Carolina, North Carolina, Georgia, Arizona, Louisiana, Alabama, and Mississippi. On a national scale, the 1943 acreage of winter vegetables requested will be about the same as the acreage for 1942. However, emphasis has been put on the value of the various vegetables in the wartime food program, with goals calling for increases ranging from 15 to 30 percent on carrots, lima beans, snap beans, and onions, and with the acreage of green peas, cabbage, fresh tomatoes, beets, and spinach at about the 1942 levels.

IMPORTS OF ROTENONE CONTINUE TO BE GIVEN HIGH PRIORITY.---War Production Board, General Imports Order M-63 as amended September 30, 1942, makes certain changes in the materials included in the three lists which accompanied the order. Rotenone-bearing roots, crude and advanced, are continued under List I. Items included under List I are imported under restrictions as to disposition, processing, transfer of possession which permits control of the imports as to the use.

In the revised list included in the order the list position of some of the materials mentioned in the War Letter for June 17, 1942 are changed, notably sesame seed and oil, which are transferred from List I to List III.

ROTENONE - PRODUCTS FOR WARBLE CONTROL IN CANADA.---The following is quoted from a memorandum issued by the Dominion Entomologist of Canada under date of October 9, 1942:

"Administrator's Order No. A-342, of August 19, 1942, limited the manufacture and use of rotenone-bearing substances to only a few purposes. Under date of October 6, the Director of Pesticides wrote to members of the insecticide industry requesting them not to make any special sales effort in connection with the use of such materials against insect pests of food crops. Instead, they were asked to prepare cattle warble powders of approved formula for use in a contemplated nationwide campaign to reduce the serious losses in leather, beef, and dairy products caused by these insects. This action will necessitate the substitution of other insecticides to control food crop insects except to the extent permitted by the quantities of rotenone-bearing materials already packaged for the use of vegetable growers."

NEW PRICES REFLECT CHANGED MARKET CONDITIONS FOR BUTYL ALCOHOL AND ACETONE.---Revision of the maximum prices for fermentation acetone, normal fermentation butyl alcohol and normal fermentation butyl acetate, to reflect recent changes in market conditions for these basic chemicals, has been ordered by Office of Price Administration in amendments to Maximum Price Regulations 36 and 37 issued October 3, 1942.

The revision establishes ceiling prices of 14.25 per pound for normal fermentation butyl alcohol and 7 cents per pound for fermentation acetone, delivered in tank cars in Eastern territory. In addition, the maximum price for normal fermentation butyl acetate is fixed at 14.75 cents per pound.

AMENDMENT MAKES CHANGES IN REPLACEMENT PRICE OR BURLAP FOR BAGS.---An amendment to Maximum Price Regulation 151 issued by Office of Price Administration October 3, 1942 makes changes in the method for determining the replacement cost of the burlap textile material from which new burlap bags are manufactured.

The amendment, among other things, assures purchasers of new burlap bags the saving afforded by the recent action of War Shipping Administration in making its war risk insurance and extended transshipment coverage available to all importers at rates substantially below the rates of commercial companies. It also provides that sales or deliveries of new cotton or burlap bags containing a commodity "packaged therein" are excluded from the operation of the regulation covering New Bags. These transactions are now covered by the provisions of the General Maximum Price Regulation or the price schedule covering sales of the packaged commodity.

FURFURAL UNDER ALLOCATION.---Another byproduct of the American farm has been recognized as a critical war material with the issuance by WPB of a General Preference Order placing furfural under complete allocation and use control. Produced by the chemical decomposition of oat hulls, cottonseed hulls, and corn cobs, furfural is a highly useful industrial solvent, and component of synthetic resins. It is now of special importance in making butadiene for synthetic rubber. Supply of raw materials from which furfural is made is almost unlimited, corn cobs and oat hulls being the products of a vast number of American farms. Plants for the chemical conversion of these farm byproducts are the bottleneck. To meet the synthetic rubber program, new furfural production facilities are being built by Defense Plant Corporation, and will be in operation by April 1, 1943.

SPOKANE AIRPORT DESIGNATED AS AIRPORT OF ENTRY.---The Spokane Municipal Airport (Felts Field) has been designated as an airport of entry for a period of one year by an order by Acting Secretary of the Treasury under date of October 3, 1942.

AMENDMENT OF ORDER ON CHLORINATED HYDROCARBON SOLVENTS.---Amendment No. 2 to General Preference Order M-41 issued October 10, 1942, by Director General for Operations, War Production Board, modifies the delivery requirements for chlorinated hydrocarbon solvents for uses with a B-2 rating. The uses of these materials for insect control are under A-10 rating and are not affected by the amendment.

SALE OF INSECT SCREEN CLOTH PLACED UNDER LICENSE.---Amendment to revised price schedule 40 issued by the Office of Price Administration on October 15, 1942 modifies provisions of Supplementary Order No. 18 to provide for the licensing of all persons except mills, manufacturers, or producers selling builder's hardware or screen cloth products. This order is effective October 21, 1942.

October 24, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

CONSERVATION OF ROTENONE

Early in September the Office for Agricultural War Relations submitted to the Bureau a request from the Agricultural Chemicals Unit, Chemicals Branch, War Production Board, for a statement on the uses of rotenone as an insecticide, indicating that the information was desired for use in considering procedures that might be followed to get the most effective use of the limited supplies of rotenone that may be available. The request asked that in formulating the reply consideration be given to the following points:

- (1) The possibility of endorsing a standardized rotenone dust containing less than the prevailing content of rotenone.
- (2) The elimination of small packages to discourage the use of rotenone for unapproved purposes.
- (3) List of crops in the order of their importance and need for treatment with rotenone, keeping in mind crop value, availability of substitute insecticides, and present production goals. It was suggested that the list be prepared in such a way as to make it possible to indicate uses that could be met if different amounts of rotenone were available for the 1943 season. It was also suggested that in preparing this list consideration be given to the possible desirability of allocating available supplies by States as well as by crops.
- (4) Conservation of rotenone by the use of supplements.

In considering this request a review was made of available information as to the uses of rotenone in the control of various kinds of insects, particularly those which attack crops having a high priority in the present production goals and livestock. This review included consideration of the need for the use of rotenone to control certain pests or to protect certain crops for which its use was not authorized under the existing Conservation Order M-133, governing the uses of rotenone. Consideration was given to the use of substitutes for the control of various kinds of insect pests in various areas and on various crops. The available information indicated that substitutes for rotenone were not available for use in the control of certain pests against which it could not be used under the existing order. It was, therefore, recommended that if consistent with available supplies, the use of rotenone could be approved for the following purposes in addition to those included under the present conservation order:

Control of cat and dog fleas and ticks to protect man. This use is desirable because rotenone gives most satisfactory control of the fleas and ticks which affect the health and efficiency of civilian personnel. Certain of these transmit important diseases, particularly the common dog tick which is an important primary vector of Rocky Mountain spotted fever. It was pointed out that rotenone was available for the control of such pests in military areas and in cantonment and extra-cantonment areas under the jurisdiction of the Army and Public Health Service. Unless rotenone was available to civilians for that purpose, entomologists were not in a position to carry out their responsibility to recommend satisfactory measures for the control of these pests in civilian areas.

2. For the control of short-nosed cattle louse. The use of rotenone is the most satisfactory way of controlling the short-nosed cattle louse which injures hides and reduces the weight of infested animals, thus affecting production of meats and hides.

3. Control of European corn borer on sweet corn. The only means that can be recommended to protect sweet corn from the corn borer in the Lake States involves the use of rotenone. During the past season, the corn borer has increased in abundance and has caused material losses in certain important areas in the Lake States from which civilian population and military agencies obtain supplies of sweet corn for at least a part of the season.

4. Control of flea beetles on shade-grown tobacco. Experience for the past season has demonstrated that substitutes have not given satisfactory control of flea beetles attacking shade-grown tobacco. Pyrethrum had not proven to be a satisfactory substitute and its use was complicated by the limited supplies and the existing allocation order.

Standardization of Rotenone Insecticides.--In replying to questions on the standardization of rotenone insecticides it was indicated that this needed to be considered from the viewpoint of (a) dust mixture containing rotenone and (b) ground root containing rotenone.

(a) Dust mixture containing rotenone. The results of recent experimentation viewed in the light of the urgent need to conserve rotenone appeared to justify the conclusion that it would be practicable to establish a standardized rotenone dust mixture containing 0.5 percent of rotenone. For the purpose of this standardization a rotenone dust mixture was defined as a mixture of ground or powdered rotenone-containing root with an inert diluent. The recommendation for this reduction in rotenone content of dust mixtures was conditioned on the establishment of controls whereby the rotenone content of the marketed dust mixture will meet the recommended standard within a range of analytical results from 0.45 to 0.55 percent rotenone.

(b) Ground root containing rotenone. Available information indicated that ground root containing rotenone could be standardized to contain 5.0 percent rotenone, provided that the material was ground to a degree of fineness established by the trade in preparing an insecticide which usually provides that not less than 90 percent of the finished root powder would pass through a sieve having 200-mesh per lineal inch and all the material would pass through a sieve having 80 meshes per lineal inch. This recommendation was also conditioned on the establishment of controls whereby the rotenone content of the marketed ground root would meet the recommended standard within a range of analytical results from 4.7 to 5.3 percent of rotenone.

Package Sizes.--In reference to package sizes it was indicated that the elimination of small packages as a means of discouraging the use of rotenone by those who might purchase it for unapproved purposes had the general approval of the Bureau. It was suggested that the following sizes of packages be adopted for the different indicated categories:

Dust mixtures.....	50-lb. packages
Ground root for use on livestock.....	25-lb. packages
Ground root for use on crops.....	12-lb. packages
Ground root for control of cat and dog fleas and ticks to protect man.....	3-oz. packages

Uses of Rotenone.--In response to the request that the uses of rotenone be listed on the basis of the needs, a table was prepared which listed the uses in order of importance and the need for rotenone treatment. The headings on the table are explanatory. Copy is attached.

Conservation of Rotenone by the Use of Supplements.--With respect to the conservation of rotenone by the use of supplements, it was indicated that on the basis of available information we were not in a position to make a definite recommendation. It was pointed out that this covered the entire field of the use of rotenone-containing insecticides and that information on the suitability, relative value, and effectiveness of the wide variety of diluents, stickers, wetting agents, other conditioners, or materials that might increase its effectiveness was not sufficiently adequate to justify recommendation for the use of particular materials to the exclusion of others. The desirability of using supplements or other materials to conserve rotenone was recognized and it was suggested that provision be made to grant exemptions from limitations in individual cases of proven efficiency.

The Bureau's report was submitted to the Office for Agricultural War Relations under date of September 23. Shortly thereafter we were advised that the general recommendations had the endorsement of that office and the Department. We were then requested to consider the usefulness of rotenone as sheep dips to control sheep tick. After reviewing this situation in cooperation with the Bureau of Animal Industry, it was concluded that this use of rotenone had a rather high priority and it was recommended that this be inserted as an additional use following item 11 in the accompanying table.

Copy of the Bureau's report was made available to representatives of the War Production Board. The conservation of rotenone was discussed by them and a member of the Office for Agricultural War Relations with representatives of the industry and others at a recent meeting of the insecticide manufacturers in California. At this meeting copies of the table included in the Bureau's report were made available to those in attendance for examination. It is informally understood that after some discussion representatives of the industry received the suggestions rather favorably.

On October 16 the Agricultural Chemicals Unit of the War Production Board invited representatives of the trade and entomologists from nearby States to attend a conference to consider rotenone. At this conference the Bureau's recommendation was discussed and copies of the table included in its report were distributed to those in attendance. Various questions in reference to the recommendations were raised and there was considerable discussion on the part of those in attendance. There was not full agreement as to the adoption of all of the points presented.

We are advised that the question of amending Conservation Order M-133 in reference to rotenone is under consideration by the War Production Board.

Major uses of rotenone in agriculture, their relative importance with regard to defense value and availability of substitutes, and the estimated requirements for 1943 in terms of ground roots containing 5 percent of rotenone

(No allowance made for saving if package size is controlled)

Order of importance	Use--Crop or item protected and insect involved	Pounds used in 1941 ^{1/}		Pounds required for 1943		Reasons for difference in 1941 and 1943 estimates
		For individual uses	Accumulated subtotal	For individual uses	Accumulated subtotal	
1	Peas for pea weevil on edible peas, and seed peas in proximity with edible peas	750,000	750,000	500,000	500,000	Reduced strength ^{2/}
2	Peas for pea aphid in more important States ^{3/}	935,000	1,685,000	625,000	1,125,000	Do.
3	Beans for Mexican bean beetle in more important States ^{4/}	1,000,000	2,685,000	1,000,000	2,125,000	-
4	Cattle for cattle grubs	150,000 ^{5/}	2,835,000	400,000	2,525,000	Increased demand and importance
5	Cole crops other than cabbage for caterpillars and aphids	120,000	2,955,000	80,000	2,605,000	Reduced strength ^{2/}
6	Potatoes, certified seed, for aphids in Maine	100,000	3,055,000	70,000	2,675,000	Do.
7	Man for fleas, and ticks on cats and dogs ^{6/}	5/	-	40,000	2,715,000	-
8	Cattle for short-nosed cattle louse ^{6/}	5/	-	25,000	2,740,000	-
9	Raspberries and other brambles for raspberry fruitworm	50,000	3,105,000	50,000	2,790,000	-
10	Asparagus for asparagus beetle	100,000	3,205,000	100,000	2,890,000	-
11	Peaches, plums, grapes, and small fruits for Japanese beetle	20,000	3,225,000	20,000	2,910,000	-
12	Cherry fruitfly, Pacific mite on apples in the Northwest, and the imported currant worm on currants and gooseberries	100,000	3,325,000	100,000	3,010,000	-
13	Peas for pea aphid in less important States ^{3/}	315,000	3,640,000	210,000	3,220,000	Reduced strength ^{2/}
14	Beans for Mexican bean beetle in less important States ^{4/}	515,000	4,155,000	515,000	3,735,000	-
15	Strawberries for spittle bug	50,000	4,205,000	50,000	3,785,000	-
16	Sweet corn for European corn borer ^{6/}	30,000	4,235,000	30,000	3,815,000	-
17	Tomatoes for flea beetles	50,000	4,285,000	50,000	3,865,000	-

Continued

Major uses of rotenone in agriculture, their relative importance with regard to defense value and availability of substitutes, and the estimated requirements for 1943 in terms of ground roots containing 5 percent of rotenone
(No allowance made for saving if package size is controlled)

Order of importance :	Use--Crop or item protected and insect involved :	Pounds used in 1941 ^{1/}		Pounds required for 1943 :		Reasons for difference in 1941 and 1943 estimates :
		For individual uses :	Accumulated subtotal :	For individual uses :	Accumulated subtotal :	
18	: Cabbage for caterpillars	: 330,000	: 4,615,000	: 220,000	: 4,085,000	: Reduced strength ^{2/}
19	: Mushrooms for miscellaneous pests	: 10,000	: 4,625,000	: 10,000	: 4,095,000	: -
20	: Shade-grown tobacco in the Florida-Georgia area for the tobacco flea beetle ^{6/}	: 30,000	: 4,655,000	: 30,000	: 4,125,000	: -
21	: Shade-grown tobacco in Connecticut Valley area for potato flea beetle ^{6/}	: 50,000	: 4,705,000	: 50,000	: 4,175,000	: -
22	: Home gardens and greenhouses for miscellaneous pests	: 700,000	: 5,405,000	: 500,000	: 4,675,000	: Reduced strength ^{2/}
23	: Cotton for cotton aphid	: 50,000	: 5,455,000	: 0	: Do.	: Order M-133
24	: Cranberries for miscellaneous pests	: 75,000	: 5,530,000	: 0	: Do.	: Do.
25	: Peppers for aphids	: 50,000	: 5,580,000	: 0	: Do.	: Do.
26	: Cucurbits for miscellaneous insects	: 50,000	: 5,630,000	: 0	: Do.	: Do.
27	: Flue-cured tobacco for flea beetles	: 20,000	: 5,650,000	: 0	: Do.	: Do.
28	: Onions for thrips	: 50,000	: 5,700,000	: 0	: Do.	: Do.
29	: Eggplant for flea beetles	: 50,000	: 5,750,000	: 0	: Do.	: Do.
30	: Household insects	: 500,000 ^{5/}	: 6,250,000	: 0	: Do.	: Do.
31	: Shade trees	: 150,000	: 6,400,000	: 0	: Do.	: Do.
32	: Citrus for scale insects*	: 100,000	: 6,500,000	: 0	: Do.	: Do.

^{1/} Final estimate March 6, 1942 (from Dr. Roark sent to Dr. McCall's Committee) based on imports of 6,500,000 pounds of crude and powdered derris, cube, and timbo during 1940, containing 5 percent of rotenone.

^{2/} Strength of rotenone dust mixtures reduced from 0.75 or 1.00 percent of rotenone to 0.5 percent, with a range in analytical results from 0.45 to 0.55 percent.

^{3/} The more important States with regard to the use of rotenone on peas for the control of the pea aphid are Maine, New York, Illinois, Wisconsin, Michigan, Minnesota, Idaho, Washington, and Oregon.

^{4/} The more important States with regard to the use of rotenone on beans for the control of the Mexican bean beetle are New Mexico, Colorado, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, West Virginia, Ohio, Indiana, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, and Alabama.

^{5/} The estimate of 150,000 pounds for cattle grubs during 1941 includes all uses on domestic animals except for control of fleas, which was included in the 500,000 pounds item for Household insects.

^{6/} Now excluded under the provisions of Conservation Order M-133.

* Satisfactory substitutes can be used until rotenone materials are more readily available.

October 28, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From the
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

LIMITATION ON ATTACHMENTS AND REPAIR PARTS FOR FARM MACHINERY AND EQUIPMENT.---

Limitation Order L-170 issued October 19, 1942 by the Director General for Operations, War Production Board, establishes priority regulations for the production and sale of attachments and repair parts for farm machinery and equipment. The order relates to a goodly number of items used for the control of insect pests, including plows, harrows, stalk cutters, sprayers, dusters, and equipment needed by beekeepers.

Producers of items of farm machinery equipment and repair parts may schedule production of items notwithstanding the terms of the order if the orders for such items have a rating of AA-3.

Producers of items covered by the order are grouped into three classes, A, B, and C, on the basis of the total net sales during the calendar year 1941. The sales of Class A producers exceed \$10,000,000, those of Class B exceed \$750,000, and those of Class C do not exceed \$750,000.

Farm machinery and equipment is defined in an inclusive way. Attachment is a supplementary appliance which may be added to extend the use of the machine, and repair parts include all types of replacement parts used in repair or maintenance of machinery or equipment.

Provision is made so the Director General for Operations may issue specific instructions to increase or decrease the amounts of any of the items that may be produced if the needs are established.

The order provides that on and after November 1, 1942 no person shall sell any item of farm machinery or equipment unless he knows or has reason to know that it will be used for the production or care of crops, livestock, livestock products, or other produce on a farm. Sellers of repair parts and attachments are not to deliver them on or after November 1, 1942, unless they know or have reason to know that such parts will be incorporated in the farm machinery or equipment reasonably promptly.

It provides that after November 1, 1942 no producer shall put into process any iron or steel (excluding screws, nails, rivets, bolts, or wire, strapping, or small hardware for joining or similar purpose) to make a considerable list of items including beehives, corn cribs, cattle stalls, and livestock feeders.

It provides that in the manufacture of farm machinery and equipment and repair parts alloy steel, stainless steel, aluminum, magnesium, copper, brass, bronze, zinc, nickel, tin, cadmium, or fabricated rubber parts shall not be used where the use of less critical materials will not impair the efficiency of operation.

A schedule of quotas covering domestic production for the period November 1, 1942 to October 31, 1943 is appended. The quotas of repair parts are expressed as percentage of the average dollar value of parts sold during 1940 and 1941; those for farm machinery, equipment, and attachments are expressed as a percentage of the weight of the item during 1940 or 1941, whichever is higher. No item of farm machinery or equipment not included on the schedule shall be manufactured unless specifically exempted. The quotas for certain items, including many of those used for insect control or in beekeeping, which are all under Class C producers, follow:

Power sprayers.....	43	percent
Traction sprayers.....	21	"
Hand, knapsack, and similar sprayers of less than 6 gallons.....	9	"
Tank, barrel, knapsack, and similar sprayers of 6 gallons or more.....	36	"
Spray pumps, power.....	23	"
Power dusters.....	19	"
Traction dusters.....	23	"
Hand dusters (agricultural only).....	66	"
Stalk cutters.....	35	"
Beekeepers' supplies (except beehives).....	38	"
Beehives.....	57	"
Corn shellers, hand.....	19	"
Cider mills and fruit presses.....	12	"
Fertilizer spreaders.....	15	"

ARSENIC ORDER AMENDED.—On October 21, 1942 the Director General for Operations, War Production Board, amended General Preference Order M-152 on arsenic. On and after November 1, 1942, no person shall use any arsenic, regardless of when acquired, except as authorized by the Director General for Operations pursuant to M-152 as in effect prior to this amendment. On and after January 1, 1943, no person shall deliver or accept delivery of any arsenic except as authorized pursuant to the terms of the amended order. During the period commencing October 21, 1942 and ending December 31, 1942, no person shall deliver or accept delivery of arsenic except in accordance with M-152 as in effect prior to amendment.

Exception is made for small orders, less than 650 pounds, for use in manufacturing medicinal chemical or medicinal preparation, or for use in research, testing, analytical or educational laboratories.

In applying for arsenic, which means arsenious acid, also known as white arsenic and arsenic trioxide, special forms are prescribed. These provide for supplying information as to what will be manufactured from the material received and the use for which the product will be sold. Among the products listed to be manufactured are the standard arsenical insecticides, including calcium arsenate, lead arsenate, paris green, and such other uses as wood preservatives, arsenic acid, and glass. Among the uses are insecticides, poison bait, weed killers, wood piling, glass containers, and gas purification.

The order in effect provides for fuller information as to kind of product to be made and the use to which it will be put. It is of interest and significance that the lists of products and uses give first mention to standard arsenical insecticides and their uses. It is understood the lists of products and uses are only an indication of what supplies of arsenic may be allocated for, and that the order is to be administered so agriculture can be favorably treated.

BUFFALO REDESIGNATED AS AN AIRPORT OF ENTRY.--On October 19, 1942 the Acting Secretary of the Treasury redesignated the Buffalo Launch Club Seaplane Base as an airport of entry for civil aircraft and merchandise carried thereon arriving from places outside the United States.

FERTILIZERS FOR VICTORY GARDENS.--To overcome the extensive diversion of chemical nitrogen to Victory Gardens, lawns, and other such uses, it is proposed that a special Victory Garden fertilizer, such as the 3-8-7, be authorized and universally advertised as such. It is anticipated that through the cooperation of OPA a uniform price will be established for bags of diverse sizes so that the Victory Garden fertilizer will be available for all types and sizes of gardens.

November 3, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

ARSENICAL INSECTICIDES FOR 1943

On September 17 the Office for Agricultural War Relations requested the Bureau of Entomology and Plant Quarantine to prepare a statement on the needs for arsenical insecticides for 1943. This statement was submitted to them under date of October 12. In the request it was indicated that supplies of arsenic that could be made available for use in the manufacture of insecticides for use during the season 1943 would be somewhat less than the amount used for this purpose for 1942. It was also indicated that because of limited supplies it now appeared that one way the reduction in supplies of arsenic could be met would be to eliminate its use as a weed killer and as the active ingredient in baits for insect control.

The reply on the need of arsenical insecticides was arranged to give the various uses on a priority basis with due consideration of availability of substitutes and the need to use arsenical insecticides for other insecticides which were scarce. In arranging the uses on a priority basis consideration was given to the importance of the crop or product protected in relation to the production goals and the need for food production. The reply is largely in the form of tables. The summary table included a column of accumulative totals, giving 1943 requirements on the basis of As_2O_3 . To supplement the summary statement, four tables were submitted showing, respectively, the consumption during 1941 of calcium arsenate, lead arsenate, Paris green, and London purple, according to the crops. The estimates on the uses of each of these arsenicals for the production of various crops were arrived at as a result of conferences of Bureau employees, modified by estimates received from the principal insecticide manufacturers.

In the request from the Office for Agricultural War Relations, it was suggested that the needs for arsenical insecticides also be grouped under three main headings as to uses. Information in reference to these uses was included in the summary table and the covering memorandum summarized the uses under the requested headings as follows:

Estimated Needs of Arsenicals Under Headings as to General Uses for 1943,
in Terms of Tons of As_2O_3

1. Protection of food crops and livestock.....	10,949
2. Organized and supervised governmental programs to control destructive insects.....	537
3. Protection of non-food crops, ornamentals, and other uses.....	15,287
Total.....	26,773

The tables, which represented the report requested, have been duplicated. Copies are attached for your information but not for publication or general distribution.

Attachments

October 8, 1942

ARSENICAL INSECTICIDES

(Prepared by Bureau of Entomology and Plant Quarantine as part of a request for information on certain insecticides included in a memorandum dated September 17, 1942, from H. W. Parisius, Assistant Director, Office for Agricultural War Relations, to P. N. Annand, Chief, Bureau of Entomology and Plant Quarantine)

Major uses of arsenicals in agriculture, arranged according to crop or use, 1941 consumption, estimated requirements for 1943, and additional requirements if other insecticides are scarce

Order of Importance	Crop or Use, Insect Combated, and Locality	1941 Consumption	1943 Requirement	1943 As203 Requirements, Cumulative Total	Additional requirements if Other Insecticides are Scarce	Remarks
		Pounds	Pounds	Tons	Pounds	
1	Malaria mosquito control	150,000 PG (43)*	1,255,00 PG (357)	357		Increase is for Army use
2	Livestock dips	1,527,000 Ars. Dip (106)	Same			
3	Potatoes, for Colorado potato beetle and flea beetles	10,000,000 CA (1808)	Same	463		
		1,000,000 LA (142)	Same			
		500,000 PG (142)	Same			
		(total 2092)		2,555		
4	Tomatoes, for hornworms and fruitworm	7,450,000 CA (1347)	Same			
		300,000 LA (43)	Same			
		(total 1390)		3,945		
5	Apples, for codling moth, curculie, etc.	25,000 CA (5)	Same			Preference should be given eastern growers if allotment is reduced
		35,000,000 LA (4987)	2/3 as much if arsenic is scarce (3325)	7,275		
		(total 4992)				
6	Vegetable crops (asparagus, beans, cole crops, cantaloupes, cucumbers, eggplant, horseradish, lettuce, peppers, rutabagas, squash, watermelons)	1,710,000 CA (309)	2,025,000 CA (366)		315,000	To replace rotenone on cucurbits and eggplant
		925,000 LA (132)	Same			
		(total 441)		7,773		

continued

10-11-1914
11-12-1914
12-13-1914
13-14-1914

14-15-1914
15-16-1914
16-17-1914

Major uses of arsenicals in agriculture, arranged according to crop or use, 1941 consumption, estimated requirements for 1943, and additional requirements if other insecticides are scarce - continued

Order of Importance	Crop or Use, Insect Combated, and Locality	1941 Consumption	1943 Requirement	1943 As 203 Requirements, Cumulative Total	Additional requirements if Other Insecticides are Scarce	Remarks
		Pounds	Pounds	Tons	Pounds	
7	Sugar beets for webworms	180,000 CA (33) 25,000 LA (4) (total 37)	Same			
8	Fruits (apricots, cherries, citrus, cranberries, grapes, peaches, pears, plums, prunes, strawberries)	8,600,000 LA (1225) 425,000 CA (77) (total 1302)	Same	7,810		
9	Cotton for boll weevil, bollworm, and leafworm	54,738,856 CA (9895) 1,000,000 LF (181) 1,500,000 LA (214) 2,000,000 PG (569) 959,000 Misc. (480) (total 11,339)	Same			
10	Governmental cooperative control programs for White-fringed beetle Gypsy moth Japanese beetle Miscellaneous pests	500,000 CA (90) 2,000,000 LA (285) 910,000 LA (129) 500,000 LA (71)	Same 1,742,000 LA (248) 900,000 LA (128) Same			

continued

Major uses of arsenicals in agriculture, arranged according to crop or use, 1941 consumption, estimated requirements for 1943, and additional requirements if other insecticides are scarce - continued

Order of Importance	Crop or Use, Insect Combated, and Locality	1941 Consumption	1943 Requirement	1943 As ₂ O ₃ Requirements, Cumulative Total	Additional requirements if Other Insecticides are Scarce	Remarks
		Pounds	Pounds	Tons	Pounds	
10	Governmental cooperative control programs for Grasshopper and Mormon cricket	755,000 As ₂ O ₃ as Sod. Ars. (378) (total 953)	None			Sodium fluosilicate will be used in place of sodium arsenite
11	Nuts (pecans, walnuts)	20,000 CA (4)	Same	20,988		
		100,000 LA (14) (total 18)	Same			
12	Termite control	200,000 As ₂ O ₃ (100)	Same	21,006		
13	Apples for codling moth control in areas where partially satisfactory substitutes can be used	(see item 5)	1/3 of 1941 (1662)	21,106 22,768		
14	Home gardens & fruits, for miscellaneous leaf-feeding insects	5,835,021 LA (831) 1,000,000 PG (284) 350,000 LP (63) (total 1178) (see item 9)	350,000 LA (50) Same Same 400,000 CA (72)		400,000	To replace rotenone
15	Cotton		1/4 more (2474)	23,237		
16	Tobacco for budworms, hornworms, and flea beetles	10,000 CA (2) 600,000 LA (86) 850,000 PG (99) (total 187)	200,000 CA (36) Same Same	25,711	190,000	
				25,932		

continued

Major uses of arsenicals in agriculture, arranged according to crop or use, 1941 consumption, estimated requirements for 1943, and additional requirements if other insecticides are scarce - continued

Order of Importance	Crop or Use, Insect Combated, and Locality	1941 Consumption	1943 Requirement	1943 As ₂ O ₃ Requirements, Cumulative Total	Additional Requirements if Other Insecticides are Scarce	Remarks
		<u>Pounds</u>	<u>Pounds</u>	<u>Tons</u>	<u>Pounds</u>	
17	Forage & cover crops (alfalfa, Austrian winter peas for seed)	150,000 CA (27)	250,000 CA (45)	25,977	100,000	To replace rotenone for pea weevil
18	Shade trees & ornamentals	3,000,000 LA (427)	Same	26,404		
19	Nurseries, lawns, and golf greens	2,590,000 LA (369)	Same	26,773		
20	Weed eradication	13,460,000 As ₂ O ₃ as Sod. Ars. (6730)	None; other herbicides are available	26,773		
	Totals - 1941	75,208,856 CA (13595) 62,885,021 LA (8960) 4,000,000 PG (1137) 1,350,000 LP (244)				

* Numbers in parentheses denote equivalent short tons of white arsenic, As₂O₃.

The abbreviation CA = Calcium Arsenate
 " " LA = Lead Arsenate
 " " PG = Paris Green
 " " LP = London Purple

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the problem and the objectives of the research.

2. The second part of the report is a detailed description of the methods used in the study. It includes a discussion of the experimental design, the data collection procedures, and the statistical analysis techniques.

3. The third part of the report is a discussion of the results of the study. It presents the findings of the research and discusses their implications for the field of study.

4. The fourth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study, and the references list the sources of information used in the research.

(Revised Oct. 5, 1942)

CALCIUM ARSENATE

Consumption in the United States during the 12 months ended
December 31, 1941, according to crop

Total - 75,208,856 pounds

Crop	Pounds	Percent	Equivalent short tons of white arsenic, As_2O_3
Alfalfa	150,000	0.2	27.1
Apples	25,000	0.03	4.5
Asparagus	10,000	0.01	1.8
Beans	200,000	0.3	36.2
Beets	180,000	0.2	32.5
Cabbage	400,000	0.5	72.3
Cantaloupes	250,000	0.3	45.2
Califlower	50,000	0.07	9.0
Citrus (bait for calyx worm)	50,000	0.07	9.0
Cotton	54,738,856	72.8	9,894.6
Cucumbers	45,000	0.06	8.1
Eggplant	5,000	0.01	0.9
Grapes	10,000	0.01	1.8
Horseradish	5,000	0.01	0.9
Lettuce	500,000	0.7	90.4
Pears	5,000	0.01	0.9
Pecans	20,000	0.03	3.6
Peppers	200,000	0.3	36.2
Potatoes	10,000,000	13.3	1,807.6
Rutabagas	10,000	0.01	1.8
Squash	20,000	0.03	3.6
Strawberries	360,000	0.5	65.1
Tobacco	10,000	0.01	1.8
Tomatoes	7,450,000	9.9	1,346.7
Watermelons	15,000	0.02	2.7
Government control programs	500,000	0.7	90.4
Total	75,208,856	100.08	13,594.7

Factors

100 lbs. commercial calcium arsenate is equivalent to 36.2 lbs. As_2O_3

100 lbs. As_2O_3 is equivalent to 276.2 lbs. commercial calcium arsenate

Prepared by Bureau of Entomology and Plant Quarantine

Journal of Management Education 30(6)p. 789-804
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(Revised Oct. 5, 1942)

LEAD ARSENATE

Consumption in the United States during the 12 months ended
December 31, 1941, according to crop

Total - 62,885,021 pounds

<u>Crop</u>	<u>Pounds</u>	<u>Percent</u>	<u>Equivalent short tons of white arsenic, As₂O₃</u>
Apples.....	35,000,000	55.7	4,987.2
Apricots.....	200,000	0.3	28.5
Asparagus.....	25,000	0.04	3.6
Beets (sugar beets).....	25,000	0.04	3.6
Cabbage and other cole crops.....	900,000	1.4	128.2
Cherries.....	600,000	0.9	85.5
Cotton.....	1,500,000	2.4	213.7
Cranberries.....	100,000	0.2	14.2
Grapes.....	1,500,000	2.4	213.7
Peaches.....	3,000,000	4.8	427.5
Pears.....	3,000,000	4.8	427.5
Pecans.....	50,000	0.08	7.1
Plums and prunes.....	100,000	0.2	14.2
Potatoes.....	1,000,000	1.6	142.5
Strawberries.....	100,000	0.2	14.2
Tobacco.....	600,000	0.9	85.5
Tomatoes.....	300,000	0.5	42.8
Walnuts.....	50,000	0.08	7.1
Government control programs	4,000,000	6.4	569.9
Home gardens and orchards..	5,835,021	9.3	831.4
Lawns and golf greens.....	1,000,000	1.6	142.5
Nurseries.....	2,000,000	3.2	284.9
Shade trees and ornamentals	2,000,000	3.2	284.9
Total	62,885,021	100.24	8,960.2

Factors

100 lbs. commercial lead arsenate is equivalent to 28.5 lbs. As₂O₃.

100 lbs. As₂O₃ is equivalent to 350.9 lbs. commercial lead arsenate.

Prepared by the Bureau of Entomology and Plant Quarantine

October 5, 1942

PARIS GREEN

Consumption in the United States during the 12 months ended
December 31, 1941, according to crop

Total - 4,000,000 pounds

<u>Use</u>	<u>Pounds</u>	<u>Percent</u>	<u>Equivalent short tons of white arsenic, As₂O₃</u>
Mosquito control	150,000	3.8	42.6
Cotton	2,000,000	50.0	568.6
Potatoes	500,000	12.5	142.2
Tobacco	350,000	8.8	99.5
Home Gardens	<u>1,000,000</u>	<u>25.0</u>	<u>284.3</u>
Total	4,000,000	100.1	1,137.2

Factors

100 lbs. commercial paris green is equivalent to 56.8 lbs. As₂O₃.

100 lbs. As₂O₃ is equivalent to 176.1 lbs. commercial paris green.

Prepared by the Bureau of Entomology and Plant Quarantine

October 5, 1942

LONDON PURPLE

Consumption in the United States during the 12 months ended
December 31, 1941, according to crop

Total - 1,350,000 pounds

<u>Use</u>	<u>Pounds</u>	<u>Percent</u>	<u>Equivalent short tons of white arsenic, As₂O₃</u>
Cotton	1,000,000	74.1	180.9
Home gardens	<u>350,000</u>	<u>25.9</u>	<u>63.3</u>
Total	1,350,000	100.0	244.2

Factors

100 lbs. commercial London purple is equivalent to 36.2 lbs. As₂O₃.

100 lbs. As₂O₃ is equivalent to 276.2 lbs. commercial London purple.

Prepared by the Bureau of Entomology and Plant Quarantine.

November 9, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From

Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

FARM MACHINERY FREEZE ORDER ISSUED.--Amendment 1 to Administrative Order 28 dealing with Farm Machinery and Equipment, issued by the Price Administrator on October 24, 1942, authorized and directed the Secretary of Agriculture to exercise the functions, duties, powers, authority, and discretion conferred by the order for the purpose of securing efficient rationing of farm machinery and equipment. Supplementary orders have been issued by the Acting Secretary of Agriculture on the rationing of farm machinery and equipment. A summary of these follows:

All new farm machinery and equipment except repair parts were frozen November 1 under Temporary Rationing Order B, which will remain in effect until State and county quotas are established as a basis for a permanent rationing order.

The freeze order covers two main types of farm machinery. The first--Schedule I--includes most of the heavier labor-saving machines which are unusually important as a result of the farm labor shortage. Dealers, distributors, and manufacturers, under the freeze order, may not sell or transfer any of the 144 items listed in this schedule.

The second--Schedule II--includes miscellaneous items of farm machinery and equipment, generally requiring less metal in manufacture. The order will stop transfer of these items by distributors and manufacturers, but dealers, other than distributors and manufacturers, may sell for farm use these items now in their stock.

The Department of Agriculture and the State U.S.D.A. War Boards will establish State and county quotas in order to obtain the most effective use of the limited amount of new farm machinery and equipment provided for in War Production Order L-170 issued October 19. As a step in the establishment of quotas, the Department has asked dealers, distributors, and manufacturers to report inventories of certain new farm machinery and equipment items on hand October 31.

County farm machinery rationing committees will issue rationing certificates under the quota system when established. Until the permanent rationing program takes effect emergency needs for new machinery and equipment frozen under the latest order will be handled by the county farm machinery rationing committees, the State War Boards, and the Special War Board Assistant to the Secretary.

The order forbids manufacturers and distributors to move any item in Schedule I or II except in the county where the new machinery or equipment was located November 1. No one, including dealers, may move Schedule I items from their location in one county to another. However, the Special War Board Assistant may, upon request, authorize movement of machinery or equipment between counties. Common carriers may complete delivery of new farm machinery or equipment accepted for shipment before November 1.

1943 FARM MACHINERY PROGRAM ANNOUNCED.--Extra good care and widest possible use of existing farm machinery and equipment is emphasized by the WPB order restricting 1943 manufacture of new farm machinery and equipment to 20 percent of average production in 1940 and 1941. Production of repair parts will be at 130 percent of average output in 1940 and 1941. The new program covers the period from November 1, 1942 to October 31, 1943.

Production of new farm machinery and equipment in 1942 averaged about 83 percent, while repair parts were at 150 percent of 1940 production.

In addition to setting levels for 1943 machinery production, the limitation order, in line with WPB's concentration program, transferred production of all except a few of the major machines from larger to smaller companies.

Manufacturers are classified into large, medium, and small producers on the basis of net sales in 1941: Class A--producers whose sales totaled more than 10 million dollars in 1941; Class B--producers whose total sales were between \$750,000 and 10 million dollars; Class C--producers whose sales were below \$750,000.

The large companies have machine tools and equipment which can be used readily in producing direct war equipment, and consequently the concentration program emphasizes the shift in farm machinery production to the smaller companies. Because of this and other considerations, the percentages of any kind of machinery which a manufacturer may produce vary as to whether he is in Class A, B, or C. The quotas vary from item to item, but in general the percentages are higher for Class B producers than for Class A, and still higher for Class C. For example, the quota percentage for potato planters is zero for Class A producers, 16 percent for Class B, and 75 percent for Class C.

Because of the distribution of production in accordance with the terms of the concentration program, and because existing inventories have a direct bearing on the quantity of materials some producers will be able to use, it is difficult to state the percentages of various items of machinery to be available in 1943 as compared with 1940 production. However, a few examples, giving the number of machines to be manufactured in 1943 compared to the number in 1942, will indicate the trend in machinery production:

	<u>1942</u>	<u>1943</u>
2-bottom tractor plows	78,000	16,200
Milking machines	70,000	50,000
Disc harrows	78,000	30,000
1-row, 2-horse cultivators	15,000	3,300
2-row tractor cultivators	69,000	30,000
Grain binders	10,650	2,000
Mowers, horse-drawn	45,000	14,000
Hay loaders	19,600	10,000

	1942	1943
2-row horse-drawn corn planters	18,000	4,680
Grain drills	25,400	6,700
Small combines	38,000	14,385
Side delivery rakes	20,300	12,900
Manure spreaders	46,000	7,130
Tractors	170,000	37,000
Peanut pickers	3,600	800

The quotas established for individual items of machinery cover only 75 percent of the materials allocated for next year's production. The balance will be distributed later, chiefly on the basis of efficient use of existing inventories.

Repair parts, tractors, tractor-mounted implements, combines, harness hardware and hand tools are exempt from the concentration order.

Farm machinery and equipment completely manufactured for domestic sale before October 31, 1942 may be sold any time after that date without deducting it from new quotas, provided it was manufactured in accordance with the terms of the order in effect this year.

According to WPB estimate, the new limitation order will save approximately 500,000 tons of steel and other critical materials for direct war uses. About 75 percent of all finished steel is now going for such uses.

NEW REGULATION ISSUED ON FARM EQUIPMENT PRICES.--On October 22, 1942 the Price Administrator issued a new regulation, MPR 246, effective November 15, designed to fit the pricing needs of the farm equipment industry.

The regulation provides that maximum prices for all items of farm equipment, except new items, shall be those in effect March 31, 1942. These prices reflect those prevailing since the fall of 1941, because farm equipment prices had been held stable since that time under an informal price control program inaugurated in April 1941.

Experience under the General Maximum Price Regulation, however, indicated its provisions for establishing maximums for new items or items of modified design were not flexible enough for farm equipment. The new regulation has been drawn to provide a tailor-made regulation for farm equipment, with its particular pricing problems.

In the farm equipment industry, manufacturers and jobbers operate from price lists predominantly. The new regulation provides that maximum prices shall be those appearing in price lists which were actually issued and became effective on or before March 31, 1942. Prices thus arrived at are generally the same as were those provided under the base period of the General Maximum Price Regulation.

In addition the regulation permits adjustments of prices of items which have been changed in design, specification or equipment since March 31.

For entirely new items, unlike anything the manufacturer made before March 31, 1942, the manufacturer may determine his maximum price on the basis of labor rates and materials prices in effect on October 1, 1941, using the price-determining method he had in effect on that date. Where freight rates are a factor, freight rates of March 31, 1942, are to be used.

INSECTICIDES COVERED BY IMPORT RULING.--Red squill and pyrethrum, which are important in control of rodents and insects, have been added by WPB to the list of materials which may not be imported by persons other than Government agencies without special WPB authorization. Imports may continue under existing contracts, but special authorization to process or move the commodities, once imported, must be secured.

Red squill and pyrethrum are essential chemicals needed by agriculture and which are not available in adequate quantities.

At the same time WPB announced that the use of tinplate in packing pyrethrum and rotenone base insecticides is now prohibited. Packers of these products, which are the more expensive types of insecticides, can substitute blackplate or glass for the previously used tinplate containers.

EXPORTATION OF PYRETHRUM AND ROTENONE PROHIBITED.--On November 2, 1942, the Export Control Branch of the Office of Export issued amendment LXII to General Regulations to be effective November 12, 1942, which prohibits the exporting of pyrethrum extract, pyrethrum flowers, rotenone, cube root extract, and root powder. The original order provides authority for exceptions under certain conditions.

IMPORTATION OF ROTENONE FROM BRAZIL AND PERU.--A government program for the purchase and importation of rotenone from Brazil and Peru to be carried out by Commodity Credit Corporation was announced jointly on November 5 by the United States Department of Agriculture and the Board of Economic Warfare. Officials hope to import at least 4-1/2 million pounds of the insecticide during the next 12 months to help make up for the reduction in imports resulting from Japanese invasion of Singapore and to facilitate increased truck crop and livestock production. Rotenone is an insecticide needed in combatting ticks, weevils, aphids, and other truck and livestock pests.

Under the plan, the Commodity Credit Corporation is the exclusive purchaser of all rotenone-bearing roots (unground or powdered) having a rotenone content of not less than 3 percent. Prices paid are 16-1/2 cents per pound f.o.b. Iquitos, Peru, and 17 cents per pound, North Brazil Ports for rotenone-bearing roots containing not less than 5 percent crude rotenone, and not more than 12 percent moisture on arrival, and 21 to 21-1/2 cents per pound respectively for powder of not less than 5 percent crude rotenone. Adjustments are specified for roots or powder of lower or higher crude rotenone content.

Purchases will be made through existing commercial companies acting as agents for the CCC, so as not to disturb normal business channels. Sales of stocks acquired under the program will be made upon approval of the War Production Board at prices that are not in excess of prices established by the Office of Price Administration. The program will be practically self-liquidating since the ceiling price for crude rotenone is high enough at present to permit recovery of all costs to be incurred by the CCC.

ORDER ON STEEL SHIPPING DRUMS AMENDED.---On October 23, 1942, the Director General for Operations, War Production Board, issued amendment 2 to Limitation Order L-197 governing steel shipping drums. The amendment clarifies certain paragraphs in the original order and defines used drums to mean a drum which has been partially or wholly filled with any product or commodity for the storage or shipping purposes in the course of business. New drums are defined to mean any drum which has not been used. The effective dates of the use of drums are also modified. The drums may be used only for packing the following products listed in the original order. It sets dates when drums may be used for these purposes as follows: (1) New or used ones which were manufactured on or after September 14, 1942; (2) new or used ones which were purchased or delivered on or after September 14, 1942; and (3) used drums which were delivered on or after November 7, 1942.

THE DELIVERY OF IRON AND STEEL SUBJECT TO LIMITATION.---Amendment 7 to Supplemental Order M-21-b, issued on October 30, 1942, by the Director General for Operations, War Production Board, places limitations on delivery by warehouses and dealers of various kinds of iron and steel. The order covers stainless steel products, tool steel products, alloy steel products, and all steel and iron products. It provides that, without the approval of the Director General for Operations, warehouses or dealers may deliver nails, staples, bale wire, woven or welded fence, poultry netting, and certain other related articles for maintenance and repair purposes only.

THE USE OF NEW STEEL SHIPPING DRUMS CONTROLLED.---General Preference Order M-255, issued by the Director General for Operations, War Production Board, on November 2, 1942, places restrictions on delivery and receipt of new drums or any metal part thereof purchased on and after November 16, 1942. Delivery and receipt are conditioned upon authorization from the Director General for Operations. Applications for approval for delivery should state in detail the products with which the drums to be purchased or used are to be packed, give the name of the party to whom said drums are to be shipped, and the use to which the products shipped are to be put, together with such other information as may be requested by the Director General for Operations.

PRICE FOR COPPER INSECT SCREENING.---Order 5 under MPR 204 issued by the Price Administrator November 3, 1942, fixes the maximum price for copper insect screening sold or delivered to the Metals Reserve Company, the Copper Recovery Corporation. This is the net price paid by the holder, plus 10% of such price f.o.b. shipping point.

MOLASSES, CERTIFICATE AS TO USE.---Amendment 4 to General Preference Order M-54, issued by the Director General for Operations, War Production Board, November 2, 1942, and effective that date, requires that molasses produced in Louisiana after November 2, 1942, shall not be delivered unless the receiver certifies that he will not use or resell the product for the manufacture of mixed feed, the manufacture of vinegar or for ensilage or direct feed. Exceptions may be authorized and the order does not apply to mingled stock.

ORDER ON BURLAP AND BURLAP PRODUCTS AMENDED.--Director General for Operations, War Production Board, issued on November 2, 1942 an amendment to Conservation Order M-47 dealing with burlap and burlap products. The amended order provides for the control of the importation and manufacture of burlap and burlap products. It provides that no importer, importing bag manufacturer, or person shall deliver, sell, manufacture, process, use, or otherwise release burlap without the authorization of the Director General for Operations, except to fill orders with a preference rating of A-1-c or higher, or to fill orders from Board of Economic Warfare, Defense Supplies Corporation, or corporations organized under the authority of the Reconstruction Finance Corporation Act. The order provides for setting up quotas for the importation of these products, indicates how they shall be imported, and the ports through which they may be imported. It further provides that certificates shall be signed by users accepting delivery to the effect that the material delivered is needed to put into process the manufacture of agricultural bags within 60 days after receipt.

CALEXICO DISCONTINUED AS AIRPORT OF ENTRY FOR ALIENS.--On October 19, 1942, the Attorney General issued an order (General Order C-2; 14 Suppl.) discontinuing Calexico Municipal Airport as a designated port of entry for aliens arriving by aircraft.

MISCELLANEOUS

FROZEN VEGETABLE REQUIREMENTS FOR ARMED FORCES ANNOUNCED.--Frozen vegetable requirements of all the United States armed forces in 1943 are estimated at 70.9 million pounds, WPB announces.

Previously, it was announced that the estimated 1943 requirements for the Army alone are 53 million pounds. The total now announced includes the needs of the Army, Navy, and other branches of the service.

Estimated total requirements by commodities follow:

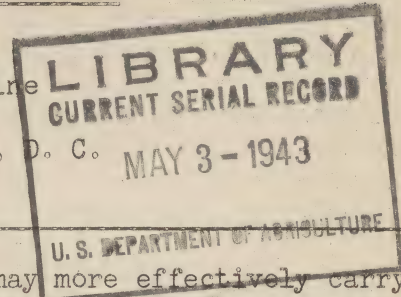
<u>Commodity</u>	<u>Pounds</u>
Beans (lima).....	13,400,000
Beans (snap).....	8,000,000
Corn (sweet).....	5,400,000
Peas.....	30,700,000
Spinach.....	13,400,000
Total.....	70,900,000

Frozen vegetables other than those listed will be considered by the armed forces if available in sufficient quantities. If such quantities are obtained, they may be substituted for some of the listed items, thereby reducing the requirements for those items.

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November 28, 1942

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.



This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

SELECTIVE SERVICE APPEALS FOR AGRICULTURAL OCCUPATION.--On November 18, 1942 the Director of Selective Service amended the Selective Service Regulations, effective November 20, 1942, to provide that registrants engaged in agricultural work may appeal from the local board's determination. The regulation provides that the registrant may, within ten days from the date of the mailed notice of the local board, file a written notice of appeal requesting determination if it is to the best interest of the war effort for him to leave his agricultural occupation or agricultural endeavor essential to the war effort for other service. It also provides that such an appeal shall immediately be forwarded by the local board to the board of appeal and that the appeal board shall make an immediate determination and advise the local board who shall notify the registrant.

LESS ESSENTIAL VEGETABLES.--On November 9, 1942 the Secretary of Agriculture as Chairman of the Foods Requirements Committee listed the less essential winter vegetable crops. These include cantaloupes, cucumbers, cauliflower, eggplant, watermelons, bleached celery, head lettuce, green peppers, asparagus, and artichokes. The statement advised that the Department of Agriculture could not assist with the production or marketing of these crops by (1) furnishing labor for their production; (2) recommending that their transportation or that supplies of critical materials in connection with these crops be given a high rating only after provisions have been made for more essential crops. It also indicated that nitrogen fertilizer for these crops may well be cut 50 percent of 1942.

RATIONING OF NEW FARM MACHINERY AND EQUIPMENT.--On November 21, 1942 the Acting Secretary of Agriculture issued Rationing Order C, effective November 28, 1942, providing for the rationing of new farm machinery and equipment. The order establishes county farm rationing committees, provides two schedules of equipment quotas and allocations. Purchase certificates are not necessary for the transfer of items listed under Schedule II. Power sprayers, not including engines; traction sprayers; power spray pumps; power dusters with tractor mounted dusters; and traction dusters are included among the items under Schedule I. Purchase certificates for items under Schedule I are to be secured from the county committees.

USE OF COPPER IN FARM MACHINERY AND EQUIPMENT AND REPAIR PARTS CONTROLLED.--Supplementary Limitation Order L-170-a issued, and effective, November 7, 1942 by the Director General for Operations, War Production Board, specifies the purposes and conditions under which copper products or copper may be used in Farm Machinery and Equipment and Repair Parts therefor. The approved uses are few in number and relate largely to critical engine parts including cooling control devices, electrical equipment, bearing, bushings, gaskets, etc.

PETROLEUM SULFONATES PLACED UNDER CONTROL.--General Preference Order M-188 issued November 10, 1942 by the Director General for Operations, War Production Board, restricts the delivery and use of petroleum sulfonates except as specifically authorized or directed by the Director General for Operations. Petroleum sulfonates are defined to mean, "the original or neutralized product of the reaction between intermediate petroleum fractions and oleum or sulfuric acid, known to the trade variously as mahogany soap, mahogany sulfonate, sodium sulfonate, soap base, oil or water soluble sulfonates and their metallic salts whether in crude or refined form."

The order permits the acceptance of 50 pounds or less in any calendar month provided that delivery is to persons who are not authorized to accept any quantity of the material during such month.

Those desiring to receive deliveries should file Form PD-600 with the Chemical Branch of the War Production Board. The application should show the amount of material desired, the uses and other information required by the order. Among the uses specified is the use of the material as a wetting agent.

BUTYL ALCOHOL PLACED UNDER CONTROL.--General Preference Order M-159 as amended by the Director General for Operations, War Production Board, on November 16, 1942 provides that the delivery and use of Butyl Alcohol shall be specifically authorized or directed by the Director General for Operations. It permits delivery of 54 gallons or less in any calendar month provided the person has not been specifically authorized to accept delivery of any amount. Those desiring to secure supplies shall make application to the War Production Board on Form PD-600 specifying among other things the quantity sought and the use to which it will be put. Among the uses listed is, "Insect repellents."

December 5, 1942

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LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE
From the
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

(For administrative use only)

PYRETHRUM IN AGRICULTURE

In response to a request of October 12, 1942, from the Office for Agricultural War Relations, the Bureau prepared a memorandum on the estimated requirements of pyrethrum in agriculture for 1943. This, by request, included consideration of the use of pyrethrum insecticides as a matter of public health. With the approval of the Office for Agricultural War Relations this statement and attachment, which were forwarded November 21, 1942, are reproduced below for the information of cooperating entomologists.

"This will acknowledge your memorandum of October 12, in which you request a statement on the estimated requirements of pyrethrum in agriculture for 1943 and in which you outline tentatively the restricted and unrestricted requirements of pyrethrum for various major uses during the last half of 1942 and during the calendar year 1943.

"Since the receipt of this memorandum, representatives of the Bureau have devoted considerable time to reviewing the most recently assembled information regarding the uses of insecticides containing pyrethrum and several conferences dealing with this subject have been held by the research division leaders of this Bureau, in which representatives of other interested agencies participated. During these conferences particular attention has been devoted to the conservation and substitution programs, with respect to agriculture's requirements for pyrethrum, as requested in your memorandum. These deliberations included not only a consideration of insecticides which could be substituted for pyrethrum but critical comparisons, followed by appropriate adjustments, were also made between proposed allotments of pyrethrum for certain uses in instances where allotments of rotenone or nicotine or arsenicals for the same uses had been suggested in preceding memorandums from this Bureau to your Office dealing with the three last-mentioned insecticide materials. Appropriate consideration has also been given to insect control measures other than the use of insecticides as well as to the relative importance and value of the crops or uses involved and to current crop production goals. The results of these considerations and deliberations are assembled in the accompanying statement. All estimates are made upon the basis of pyrethrum flowers containing 1.3 percent of total pyrethrins.

"In the statement it will be noted that in addition to listing our interpretation of each of the uses of pyrethrum in their apparent order of importance, with suggested allotments for each use, a column of accumulative subtotals is given which will enable you to determine at a glance the items or uses which will fall above or below any given level of pyrethrum availability. In addition, there is included a column of remarks which gives pertinent information respecting the status of insecticides which may be used as substitutes, control measures other than insecticides, explanations regarding increases or decreases in quantities used in 1941 as compared to anticipated 1943 requirements, and similar explanations. The arrangement of this statement, therefore, conforms to your request that it be prepared along the same lines as the one dealing with rotenone-containing insecticides and which was included in our memorandum to Mr. Parisius of September 23.

"In preparing this statement we have kept in mind your specific request that provision be made for the use of pyrethrum insecticides in public institutions, restaurants, hotels, and hospitals as a matter of public health. The estimated requirements of pyrethrum for this particular use is given in Item 6 of the statement.

"It is hoped that this memorandum, together with the accompanying statement, will supply the basic information desired."

November 16, 1943

PYRETHRUM INSECTICIDES

(Prepared by the Bureau of Entomology and Plant Quarantine to accompany a memorandum to the Office for Agricultural War Relations on the Subject "Estimated Requirements of Pyrethrum in Agriculture 1943")

Major uses of pyrethrum in agriculture, its relative importance with regard to defense value, and suggested allotments for 1943, in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins

Order of importance	Use--Crop or item protected, insect involved, and locality or region	Used in normal year (1941) Pounds	Suggested allotments for 1943		Remarks - Insecticide substitutes or alternative control methods
			For individual uses	Accumulated subtotal	
			Pounds	Pounds	
1	SUGAR BEET SEED CROPS for beet leafhopper and plant bugs (Lygus) in Southwest	50,000	50,000		No effective substitute.
2	EARWORM CONTROL in seed and market garden sweet corn	20,000	25,000	75,000	Dichloroethyl ether usable as a substitute but is unavailable.
3	BEANS for potato leafhopper	500,000	500,000	575,000	Pyrethrum needed especially to combat high infestations. Bordeaux mixture or sulfur satisfactory for low or medium infestations.
4	COLE CROPS ^{2/} other than cabbage for caterpillars	250,000	250,000	825,000	Rotene an effective substitute but probably will not be available.
5	LIVESTOCK AA SPRAYS	4,000,000	1,500,000	2,325,000	Derris for protection of milk and feed lots for beef and reduction of injuries. Cattle fly traps may be used as partial substitutes at dairies but require labor and screening for construction. Also such traps are new.
6	AA SPRAYS AND DUSTS for use in hospitals, hotels, and institutions for protection of health of the public from mosquitoes, flies, cockroaches, fleas, and ants	2,000,000	750,000	3,075,000	For licensed pest control operators, who would use 5 or 6 percent activators in sprays to conserve pyrethrum and not more than these amounts because of irritating properties of the activators.

Major uses of pyrethrum in agriculture, its relative importance with regard to defense value, and suggested allotments for 1943, in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins

Order of importance	Use--Crop or item protected, insect involved, and locality or region	Used in	Suggested allotments		Remarks - Insecticide substitutes or alternative control methods
		normal	for 1943 ¹		
		year (1941)	For individual uses	Accumulated subtotal	
		<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	
7	POTATOES for potato leafhopper	250,000	250,000	3,325,000	Pyrethrum needed especially to combat high infestations. Bordeaux mixture or sulfur satisfactory for low or medium infestations.
8	HOUSEHOLD AA SPRAYS to protect the health of the civilian population especially in areas having camps	3,330,000	1,250,000	4,575,000	Prevention of breeding, and the use of swatters and screens will aid in control of mosquitoes and flies. For cockroaches, sodium fluoride, borax, or baits may be used for maintaining low populations but these are slow in action. For bedbugs kerosene, benzene, turpentine may be used in like manner but are also slow in action. For fleas critical materials like naphthalene or creosote sprays may be used on premises for some relief. Sprays of AA strength are sufficient for most pests but should contain 5 or 6 percent activators in order to conserve pyrethrum and not more than that because of irritating properties.
9	VICTORY GARDENS--VEGETABLES for leafhoppers, cabbage caterpillars, Mexican bean beetle, and leaftiers	250,000	750,000 ³	5,325,000	Substitutes as indicated for commercial crops.
10	CABBAGE for caterpillars (commercial control)	100,000	100,000	5,425,000	Rotenone an effective substitute but probably not available. Cryolite, paris green, or calcium arsenate before heads form. (Outer leaves may be stripped off if arsenicals or fluorine compounds applied after heads form.)

Major uses of pyrethrum in agriculture, its relative importance with regard to defense value, and suggested allotments for 1943, in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins

Order of importance	Use--Crop or item protected, insect involved, and locality or region	Suggested allotments for 1943 ^{1/}			Remarks - Insecticide substitutes or alternative control methods
		Used in normal year (1941)	For individual uses	Accumulated subtotal	
		<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	
11	CRANBERRY for black-headed fireworm, girdler, and blunt-nosed leafhopper	25,000	25,000	5,450,000	Pyrethrum supplements control by flooding and replaces rotenone which will be unavailable for this item.
12	CELERY for leaf-tier	200,000	200,000	5,650,000	No effective substitute.
13	GRAPES for leafhopper	75,000	75,000	5,725,000	Control by other materials unusually difficult in California. Pyrethrum more effective than nicotine against adults.
14	CUCURBITS ^{4/} for melon worm, pickleworm, and squash bug	50,000	100,000 ^{3/}	5,825,000	Rotenone for melon worm and pickleworm, is an acceptable substitute. Cryolite before fruits form for melon worm and pickleworm. Nicotine or hand-picking for squash bug.
15	TOBACCO for tobacco moth in open warehouses	150,000	150,000	5,975,000	No effective insecticide substitute. Use of traps aids to a limited extent. Fumigation with gas-proof curtains fairly effective but curtains possibly unobtainable.
16	GREENHOUSE VEGETABLES for red spiders, thrips, aphids, and striped cucumber beetle	125,000	125,000	6,100,000	Rotenone if available, and fumigation.
17	LARVICIDES for mosquitoes	100,000	10,000	6,110,000	Paris green or oils may be used as substitutes.

Major uses of pyrethrum in agriculture, its relative importance with regard to defense value, and suggested allotments for 1943, in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins

Order of importance	Use--Crop or item protected, insect involved, and locality or region	Used in normal year (1941) Pounds	Suggested allotments for 1943 ^{1/}		Remarks - Insecticide substitutes or alternative control methods
			For individual uses	Accumulated subtotal	
			Pounds	Pounds	
18	TOBACCO for infestations of potato flea beetles and thrips on shade-grown tobacco	None	80,000 ^{3/}	6,190,000	Rotenone if available and unrestricted is effective against flea beetles. Barium fluosilicate for flea beetles on small plants.
19	LETTUCE for loopers	50,000	50,000	6,240,000	Rotenone an acceptable substitute but not as effective as pyrethrum. Cryolite, paris green, or calcium arsenate before heads form.
20	MUSHROOMS for mushroom flies	100,000	100,000	6,340,000	Fumigation with hydrocyanic-acid gas less effective. Use of traps aids in reducing fly population to limited extent.
21	MILLS, WAREHOUSES, AND BINS for stored cereal insects	1,000,000	450,000	6,790,000	Useful supplementary control but not indispensable.
22	TREE FRUITS for aphids and leafhoppers	20,000	20,000	6,810,000	Nicotine sulfate an effective substitute.
23	GREENHOUSE FLOWERS for miscellaneous insects	125,000	125,000	6,935,000	Miscellaneous substitutes such as rotenone if available and unrestricted, nicotine, oil emulsions, fumigation, tartar emetic if available, organic thiocyanates. Hand-picking.

Major uses of pyrethrum in agriculture, its relative importance with regard to defense value, and suggested allotments for 1943, in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins

Order of importance	Use--Crop or item protected, insect involved, and locality or region	Used in normal year (1941) Pounds	Suggested allotments for 1943 ^{1/}		Remarks - Insecticide substitutes or alternative control methods
			For individual uses	Accumulated subtotal	
			Pounds	Pounds	
24	HOME PLANTINGS for miscellaneous insects on shrubs, vines, and flowers	155,000	280,000 ^{3/}	7,215,000	Miscellaneous substitutes such as rotenone if available and unrestricted, nicotine, oil emulsions, tartar emetic if available, organic thiocyanates, except for Japanese beetle for which soap sprays may be substituted. Hand-picking.
		12,925,000	7,215,000		

^{1/} The suggested allotments for 1943 should be regarded as the minimum estimates. In the instance of some of these items the estimates were scaled down in an attempt to bring the total within the limits of pyrethrum available.

^{2/} Includes such crops as cauliflower, broccoli, Brussels sprouts, kohlrabi, mustard, turnips, collards, and kale.

^{3/} Partial replacement of rotenone.

^{4/} Includes such crops as cucumbers, squash, pumpkin, watermelons, cantaloupes, and other muskmelons.

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December 5, 1942

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~~CONFIDENTIAL~~ WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

★ DEC 11 1942 ★
U. S. Department of Agriculture

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

(For administrative use only)

INSECTICIDAL USES OF CRYOLITE

In response to a request of October 17, 1942, from the Office of Agricultural War Relations, the Bureau prepared a memorandum on the estimated requirements of cryolite in agriculture for 1943. This statement and attachment were submitted on November 25, 1942, and with the approval of the Office of Agricultural War Relations are reproduced below for the information of cooperating entomologists.

"This will acknowledge your memorandum of October 17, in which you request a statement on the estimated requirements of cryolite in agriculture for 1943, in the order of their importance, including also additional uses for cryolite as a substitute for other insecticides in case agriculture can obtain a larger supply of this important fluorine compound.

"Representatives of the Bureau have devoted considerable time to a review of the most recently assembled information regarding the insecticidal uses of cryolite and several conferences dealing with this subject have been held by the research division leaders of this Bureau, in which representatives of other interested agencies participated. Attention has also been given to a statement furnished by one of the largest dealers of cryolite insecticides in this country which lists their sales records of cryolite during 1942 and preceding years, as well as anticipated sales for 1943.

"The deliberations on the subject of cryolite as an insecticide included not only a consideration of uses of this material as a substitute for other insecticides but its status as a supplement for these other insecticides was also considered. Critical comparisons, followed by appropriate adjustments, were also made between proposed allotments of cryolite for certain uses in instances where allotments of rotenone, nicotine, arsenicals, or pyrethrum for the same uses had been suggested in preceding memorandums from this Bureau to your Office dealing with the four last-mentioned insecticidal materials. Appropriate consideration was also given to the relative importance and value of the crops or uses involved and to current crop production goals. The results of these considerations and deliberations are assembled in the accompanying statement. All estimates are made upon the basis of cryolite containing 90 percent of sodium fluoaluminate.

"In the statement it will be noted that in addition to listing our interpretation of each of the proposed uses of cryolite in their order of importance, with allotments for each use, a column of accumulated subtotals is given which should enable one to determine at a glance the items or uses which will fall above or below any given level of the quantity of cryolite available. In addition, there is included a column of remarks which gives pertinent information respecting the status of insecticides which may be used as substitutes. Comments regarding increases or decreases in quantities used in 1941 as compared to anticipated 1943 requirements are also given with explanations regarding possible adjustments that can be made or would be desirable in the estimates for

cryolite if changes are made in the estimated quantities of rotenone, arsenicals, or pyrethrum listed for the same insecticidal purpose in statements on these materials already furnished. The arrangement of this statement therefore conforms to your request that it be prepared along the same lines as the statements dealing with rotenone, nicotine, arsenicals, and pyrethrum.

"It is emphasized that in general cryolite must be considered as a poor substitute for rotenone, arsenicals, or pyrethrum.

"In examining the accompanying statement it will be noted that large quantities of cryolite are estimated for use on apples and pears in combating the codling moth, for use on beans for Mexican bean beetle control, and for use on shade trees and ornamentals. In the instance of the 2,000,000 pounds of cryolite for apples and pears for codling moth given in Item 5 of the accompanying statement, it will be noted that this quantity will be needed in addition to the full lead arsenate requirement for 'Apples, for codling moth, etc.' given in Item 5 of the statement of 'Arsenical Insecticides' dated October 8, 1942. In the instance of the 6,000,000 pounds of cryolite for apples and pears for codling moth given in Item 14 of the cryolite statement, it should be emphasized that this requirement is in addition to the quantity indicated in Item 5 of the cryolite statement and that the quantity needed for the purpose indicated will be dependent upon the size of any deficiency in the quantity of lead arsenate that will be available for control of codling moth on apples and pears in the Pacific Northwest.

"One pound of cryolite is required to replace each pound of lead arsenate for the control of the codling moth.

"If the entire 35,000,000 pounds of lead arsenate indicated in Item 5 of the statement on 'Arsenical Insecticides' becomes available for control of codling moth, curculio, etc., on apples, none of the cryolite indicated in Item 14 of the cryolite statement will be required.

"In the case of Mexican bean beetle control it was necessary to provide for a large quantity of cryolite (Item 10) in order to replace approximately 475,000 pounds of rotenone which was originally estimated for this purpose but which was transferred to Item 5, 'Victory Gardens for specific vegetable pests,' listed in our statement on rotenone sent to your Office on November 10, 1942.

"It requires 6 pounds of cryolite to replace 1 pound of root containing 5 percent of rotenone for Mexican bean beetle control.

"A total of 4,500,000 pounds of cryolite is estimated for use on shade trees and ornamentals since it seems probable, according to present indications, that the 3,000,000 pounds of lead arsenate estimated for this use in the statement on 'Arsenical Insecticides' (Item 18) will not be made available.

"It requires $1\frac{1}{2}$ pounds of cryolite to replace each pound of lead arsenate for shade tree insect control.

"We believe that this memorandum, together with the accompanying statement, will supply the basic information desired."

November 20, 1942

CRYOLITE INSECTICIDES

(Prepared by Bureau of Entomology and Plant Quarantine as part of a request for information on insecticidal uses of cryolite included in a memorandum dated October 26, 1942, from H. W. Parisius, Associate Director, Office for Agricultural War Relations, to P. N. Annand, Chief, Bureau of Entomology and Plant Quarantine)

Major uses of cryolite in agriculture, their relative importance with regard to defense value and the estimated requirements for 1943 in terms of cryolite containing 90 percent of sodium fluoaluminate

Order of importance	Use - Crop or item protected and insect involved	Used in 1941	Required for 1943		Remarks
			For individual uses	Accumulated subtotal	
		Pounds	Pounds	Pounds	
1	SUGARCANE for sugarcane borer	None	320,000	320,000	No satisfactory substitute available.
2	TOMATOES for tomato pinworm	400,000	475,000	795,000	No effective substitute for cryolite. This material used for joint infestation of tomato pinworm - tomato fruitworm.
3	LIMA BEANS for lima bean pod borer	320,000	320,000	1,115,000	No satisfactory substitute.
4	BEANS for corn earworm and other caterpillars on lima beans and snap beans	125,000	125,000	1,240,000	No satisfactory substitute.
5	APPLES AND PEARS for codling moth	2,000,000	2,000,000	3,240,000	Essential in addition to full lead arsenate requirement. Normally used chiefly in Rocky Mountain States and Pacific Northwest.
6	ORANGES for calyx worms	250,000	250,000	3,490,000	Barium fluosilicate may be used as substitute.

Major uses of cryolite in agriculture, their relative importance with regard to defense value and the estimated requirements for 1943 in terms of cryolite containing 90 percent of sodium fluoaluminate

Order of importance	Use - Crop or item protected and insect involved	Used in 1941	Required for 1943		Remarks
			For individual uses	Accumulated subtotal	
			Pounds	Pounds	
7	WALNUTS for husk fly	250,000	250,000	3,740,000	Barium fluosilicate may be used as substitute.
8	POTATOES for flea beetles	115,000	155,000	3,895,000	Calcium arsenate or a rotenone-calcium arsenate combination are fairly effective substitutes.
9	SOYBEANS for velvet bean caterpillar and blister beetles	30,000	130,000	4,025,000	
10	BEANS for Mexican bean beetle	25,000	2,850,000	6,875,000	To replace 475,000 pounds of rotenone and to provide for use on beans before pods form if and when rotenone is not available in area where arsenicals cannot be used.
11	BEANS for leaf-feeding beetles (Diabroticas)	85,000	95,000	6,970,000	Used principally in West Coast States and Florida. Rotenone, nicotine fairly effective substitutes. Arsenicals used in some areas.
12	Governmental cooperative control programs for WHITE-FRINGED BEETLE	382,000	300,000	7,270,000	Decrease offset by Government stocks on hand.
	GYPSY MOTH	None	750,000	8,020,000	This quantity to replace 500,000 pounds of lead arsenate, if necessary.

Major uses of cryolite in agriculture, their relative importance with regard to defense value and the estimated requirements for 1943 in terms of cryolite containing 90 percent of sodium fluoaluminate

Order of importance	Use - Crop or item pro- tected and insect involved	Required for 1943			Remarks
		Used in 1941	For individual uses	Accumulated subtotal	
		Pounds	Pounds	Pounds	
13	CRANBERRIES for fruitworm and weevil	25,000	25,000	8,045,000	Calcium arsenate may be used against weevil if available. Rotenone probably not available for fruitworm.
14	APPLES AND PEARS for codling moth ^{1/}	<u>1/</u>	6,000,000	14,045,000	This quantity dependent upon availability of lead arsenate in Pacific Northwest.
15	COTTON for bollworm	500,000	1,000,000	15,045,000	Although not yet used extensively, cryolite is the best substitute for arsenicals known for control of bollworm on cotton. Much educa- tional or extension work is needed to teach the growers when and how to use cryolite for bollworm con- trol. In a real emergency, such as a widespread outbreak of boll- worm and shortage of arsenicals, millions of pounds of cryolite could be used advantageously.
16	PEPPERS for pepper weevil	300,000	350,000	15,395,000	Calcium arsenate may be used as a substitute but aphid infestations usually follow its use.
17	COTTON for leaf worm	50,000	100,000	15,495,000	Although less effective, in the absence of arsenicals it would be useful in holding down leaf worm damage.

Major uses of cryolite in agriculture, their relative importance with regard to defense value and the estimated requirements for 1943 in terms of cryolite containing 90 percent of sodium fluoaluminate

Order of importance	Use - Crop or item pro- tected and insect involved	Used in 1941	Required for 1943		Remarks
			For individual	Accumulated	
			uses	subtotal	
		<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	
18	VICTORY GARDENS for miscellaneous insects	10,000	200,000	15,695,000	Harmful residue hazard from cryolite less acute than from arsenicals.
19	COTTON for boll weevil	50,000	100,000	15,795,000	Cryolite is toxic to the boll weevil but only about half as effective as calcium arsenate. In absence of calcium arsenate the use of cryolite would probably increase greatly in areas of serious boll weevil damage, and on light sandy soils in South- eastern States where extensive use of arsenicals is deleterious to the growth of subsequent leguminous crops.
20	LETTUCE for loopers and beet armyworm	225,000	275,000	16,070,000	Rotenone or pyrethrum are prefera- ble, but probably will not be available. Calcium arsenate or Paris green may be used before heads form but injure small plants under some conditions.
21	TOBACCO for tobacco flea beetle on shade-grown tobacco	None	25,000	16,095,000	Rotenone most effective material. Arsenicals or barium fluosilicate fairly effective for small plants but may injure large plants.
22	TOBACCO for tobacco flea beetles and hornworms	90,000	140,000	16,235,000	Same as preceding item for flea beetles. Arsenicals for horn- worms fairly satisfactory.

Major uses of cryolite in agriculture, their relative importance with regard to defense value and the estimated requirements for 1943 in terms of cryolite containing 90 percent of sodium fluoaluminate

Order of importance	Use - Crop or item pro- tected and insect involved	Used in 1941 <u>Pounds</u>	Required for 1943		Remarks
			For individual uses <u>Pounds</u>	Accumulated subtotal <u>Pounds</u>	
23	SHADE TREES AND ORNAMENTALS	None	4,500,000	20,735,000	1½ pounds cryolite required to replace each pound of lead arsenate if latter unavailable.
24	CABBAGE for cabbage caterpillars	50,000	50,000	20,785,000	Rotenone or pyrethrum are prefera- ble. Cryolite can be used before heads form. Calcium arsenate can be substituted but is inferior to cryolite under some conditions.
25	TOMATOES for tomato fruitworm	65,000	115,000	20,900,000	Cryolite used to some extent against fruitworm, especially in California and Tennessee. Not as liable to injure fruit as calcium arsenate.
26	CUCURBITS ^{2/} for melon worm and pickleworm	40,000	45,000	20,945,000	Rotenone and pyrethrum are preferable.
		5,387,000	20,945,000		

^{1/} In addition to the quantity indicated in Item 5.

^{2/} Such as cucumbers, squash, pumpkins, and melons.

December 8, 1942

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WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

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★ DEC 10 1942 ★

From the
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

Department of Agriculture

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

(For administrative use only)

AGRICULTURAL USES OF ROTENONE

Note.--Subsequent to the submission of the report to the Office for Agricultural War Relations on Rotenone, referred to in the War Letter for Entomology and Plant Quarantine, distributed under date of October 24, 1942, the Bureau reviewed in a similar way other insecticidal materials and uses. This emphasized the need for rotenone for purposes other than those indicated in that report, particularly for control of insects attacking "Victory Gardens." The Bureau reviewed the report that had been submitted and under date of November 10, 1942, a revised statement was transmitted to the Office for Agricultural War Relations. With the approval of the Office for Agricultural War Relations portions of the statement believed to be of special interest to cooperating entomologists are reproduced below.

"When the Bureau submitted on September 23, 1942, its memorandum giving recommendations for the conservation of rotenone in reply to your memorandum of September 3, 1942, we had not had opportunity to make similar studies on other insecticides which require the use of scarce materials. Since then studies on the use of some other insecticides have been made and similar studies on certain other materials are under way. We have also at the request of your office and the War Production Board reviewed available information on insecticides that might be used to protect vegetable crops in home, farm, and community gardens from important insect pests. These studies have clearly indicated the desirability of revising the statement and especially the table entitled, 'Major Uses of Rotenone in Agriculture, Their Relative Importance with Regard to Defense Value and Availability of Substitutes, and the Estimated Requirements for 1943 in Terms of Ground Root Containing 5 Percent Rotenone,' submitted on September 23. . . .

"In revising the table of estimates we have kept in mind the suggestion included in your memorandum of October 8, 1942, in reference to the desirability of allocating rotenone for use in sheep dips in light of the unsatisfactory labor situation and the need for wool. We have also given further study to the practicability of endeavoring to allocate supplies that may be available on a regional or geographical basis. Because of the sporadic nature and the intensity of the outbreaks of certain important pests, especially the pea aphid and Mexican bean beetle, and the practical difficulties that would be involved in the distribution of supplies on this basis it is now believed that to endeavor to allocate supplies of rotenone on a regional basis would be undesirable.

"Information now at hand indicates that supplies of certain materials that can be substituted in part for rotenone will be more readily available than was previously thought and this factor has had a bearing on the table revision.

"In considering the need for insecticides to control important insects which attack vegetable crops in the farm, community, and home gardens we have reviewed carefully the materials that could be recommended for such use. This had included the comments received from various State entomologists and representatives of the industry who have suggested formulae for what may be called a 'Victory Garden' insecticide. This review has shown very clearly that no one material can be used which approximates the value and effectiveness of rotenone as a garden insecticide. It has been demonstrated also that the use of rotenone for this purpose is well established and largely as a result of extensive educational efforts carried on during the past year by the Department and cooperating State agencies. To endeavor to get the several millions of farm, community, and home gardeners to follow different practices would present many difficulties and would undoubtedly result in extensive loss in food supplies and would also involve health hazards. To do so is not believed desirable. By comparison it is believed that the fewer number of commercial growers can modify their practices more effectively and satisfactorily and without the likelihood of having their crops destroyed by insects. . . . The revised table, therefore, recommends that 710,000 pounds of rotenone be allocated for use in controlling specified insect pests of vegetables in 'Victory Gardens.'

* * *

"It is believed that there is a real and important need for having supplies of rotenone available for use in combating insects which attack vegetables in farm, community, and home gardens, insofar as this can be done consistent with the over-all program of food production. The 710,000 pounds of rotenone that are recommended to be allocated for such use will be an important, substantial aid in controlling these pests. If provisions are made to make this material available to those growers who are seriously engaged in producing vegetables to augment the food supply and they be required to certify that it will be used only for these purposes and for the pests against which it can be effectively used, it is believed that it will not be wasted or used unwisely.

"The Department of Agriculture, in cooperation with the States, has sponsored since December 1941 a 'Victory Garden' program as a means of supplementing our commercial plantings of vegetables to meet the food requirements of this country and our Allies as imposed by the war. Rotenone insecticides, because of their general usefulness and their non-poisonous nature, have been advocated naturally as satisfactory vegetable garden insecticides. They are particularly satisfactory on leafy vegetables where the utilization of an arsenical or other inorganic poison would constitute a residue hazard to the consumer. It has been shown that spray residues cannot be washed from vegetables by the ordinary washing processes. . . .

"To aid in conserving the amount of rotenone that may be allocated for use in controlling important insects which attack vegetables in farm, community, and home gardens it is recommended that it be made available for the manufacture of a 'Victory Garden' insecticide, and that this formula be marketed in unbroken three-pound paper packages appropriately labeled. . . .

* * *"

There are so many factors involved in determining the quantity of rotenone-bearing materials that will be available for 1943 that much difficulty is being experienced making satisfactory allocation. Furthermore, it now appears that the quantity of these materials available for use in 1943 will probably be less than was thought a few months ago. Important information regarding the rotenone situation will be distributed as it becomes available.

January 9, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

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COMMISSION ESTABLISHED TO STUDY TYPHUS.--Executive Order 9285, issued December 24, 1942, established the "United States of America Typhus Commission" for the purpose of protecting members of the armed forces from typhus fever and to prevent its introduction into the United States. The commission is under the direction of the Secretary of War and is to be headed by a director appointed by him. It consists of officers of the Army Medical Corps, Navy Medical Corps, Public Health Service, and other persons appointed by the Secretary of War. The director is authorized to employ necessary technical and nonprofessional personnel and make expenditures to carry out the purpose. The director is also authorized to secure the cooperation and assistance of other Governmental agencies to arrange to carry out studies, establish and maintain laboratories, secure facilities, publish scientific data, and do other things to accomplish the purpose of the order. The order establishes a "United States of America Typhus Commission Medal" which may be awarded by the President "to any person who may render or contribute meritorious service in connection with the work of the Commission."

The relation of insects to typhus and its transmission makes this order of interest to entomologists.

OGDENSBURG REDESIGNATED AIRPORT OF ENTRY.--On December 7, 1942, the Acting Secretary of the Treasury redesignated the Municipal Airport at Ogdensburg, New York, as an airport for entry of civil aircraft and merchandise carried thereon for a period of one year beginning December 10, 1942.

TRANSFER OF CERTAIN KINDS OF FARM MACHINERY AND EQUIPMENT AUTHORIZED.--Supplementary Order 2 of Farm Machinery and Equipment Rationing Order C, issued December 26, 1942, by Special War Board Assistant, Department of Agriculture, to be effective January 1, 1943, authorizes manufacturers to transfer certain specified types of new farm machinery and equipment from stocks on hand October 31, 1942. Any machinery or equipment transferred, other than for use, shall be distributed to persons who do business in the same geographical area. Acceptance may be made without a purchase certificate, provided the material is not for use. Among the machinery that may be transferred are power and traction sprayers (not including the engines), power spray pumps, and power and traction dusters.

REGULATIONS APPLICABLE TO PRIORITIES AMENDED.--Priorities Regulation 3, as amended December 26, 1942, by the Director General for Operations, War

Production Board, establishes a uniform method of application and extension of preference ratings. This amendment makes certain changes in the procedures to be followed. Those interested and concerned with preference ratings and the priority system will be interested in this order.

ORDER ON FATS AND OILS AMENDED.--General Preference Order M-71, which deals with fats and oils, was amended December 17, 1942, January 1, 1943, and January 7, 1943, by the Director General for Operations, War Production Board. This order places restrictions on (1) the manufacture of materials from oils derived from vegetables, animal, fish, or other marine animals; delivery, processing, and inventories of these materials. Certain of the oils that are covered by the order are used to a limited extent in the manufacture of soaps and other materials used in pest control. While these are not specifically mentioned in the order it may have some bearing on supplies used.

CERTIFICATES OF NECESSITY REQUIRED FOR EXPORT OF CERTAIN INSECTICIDES.--Amendment No. 96 to Export Control Regulation, issued December 24, 1942, by Chief of Office of Exports, revises the lists of commodities for which certificates of necessity are required for their export. The order is effective January 1, 1943, for all but a few of the commodities for which it is effective 30 days after December 30, 1942. Insecticides and related commodities listed are: Acetone, *arsenate of lead, *arsenate of calcium, *Paris green, *white arsenic, copper sulphate, cryolite, formaldehyde, naphthalene, and phenol. (Those preceded by an asterisk (*) are those for which the effective date is 30 days after December 30, 1942.)

IMPORTS OF PYRETHRUM AND ROTENONE PLACED UNDER CONTROL.--General Imports Order M-63 was amended December 17, 1942, by the Director General for Operations, War Production Board. The amended order provides for the control as to disposition of a goodly number of strategic materials. Included among these materials are pyrethrum, quebracho extract, and rotenone.

PURCHASE OF ROTENONE FOR IMPORT CENTRALIZED.--Early in December 1942 a program for the purchase of rotenone from Brazil and Peru was announced jointly by the Department of Agriculture and the Board of Economic Warfare. This contemplates that such purchases will be made by the Commodity Credit Corporation of the Department of Agriculture.

SULFAMIC ACID AND DERIVATIVES PLACED UNDER CONTROL.--General Preference Order M-242, as amended December 12, 1942, by the Director General for Operations, War Production Board, places sulfamic acid and its derivatives, which mean ammonium sulfamate and fire retardants made from sulfamic acid, under control. This order is of interest to pest control operators primarily because of the possible use of these materials for weed control. The materials are not, however, now used as insecticides.

COPPER CONSERVATION ORDER AMENDED.--Conservation Order M-9-c as amended December 26, 1942, by the Director General for Operations, War Production Board, prohibits the use of copper in the manufacture of a wide variety of items. Included among these are insect screen and screening and termite shields. Provision is made, however, for its use in the manufacture of insect screens and screening required for military use.

INDUSTRY ADVISORY COMMITTEE ON ARSENICAL INSECTICIDES.---On November 24, 1942, the Division of Industry Advisory Committees, War Production Board, announced the formation of an Industry Advisory Committee on Arsenical Insecticides. The Government presiding officer of the committee is Warren H. Moyer of the Chemicals Branch, War Production Board. Twelve members of the industry are members. They represent industrial concerns in all parts of the United States.

INDUSTRY ADVISORY COMMITTEE ON ETHYLENE DICHLORIDE.---On December 1, 1942, the Division of Industry Advisory Committees, War Production Board, announced the formation of an Industry Advisory Committee on ethylene dichloride. John C. Leppart of the Chemicals Branch, War Production Board, is designated as the Government presiding officer. Four representatives from the industry are the industry members.

AVAILABILITY OF INSECTICIDES FOR 1943.---The following is a statement published in the Official Weekly Bulletin of the Office of War Information for December 8, 1942.

"Arsenical Insecticides Probably Will Be Adequate for 1943

"Cotton growers, farmers, and those who produce food or other economic crops, who rely heavily on arsenical insecticides for their production, in all probability will be able to obtain an adequate supply during 1943, according to W. H. Moyer, in charge of insecticides and fungicides for the WPB chemicals division.

"Urged to Use Substitutes if Possible

"In some cases farmers probably will be urged to make greater use of items such as nicotine sulphate and cryolite, which are more plentiful than arsenicals. Rotenone and pyrethrum, both imported materials, are decidedly limited, and substitution will be necessary wherever possible."

DISTRIBUTION OF ARSENICAL INSECTICIDES.---In December 1942 the War Production Board asked the arsenical insecticide industry to continue to accept orders for minimum normal requirements of arsenical insecticides, and recommended shipment of part of the orders in the immediate future to avoid transportation bottlenecks during the spring and summer.

Members of the Arsenical Insecticide Industry Advisory Committee have been advised that if the hoarding of insecticides is permitted to a degree sufficient to protect maximum requirements in individual localities, the supply cannot possibly be sufficient to cover all emergency needs. The industry is asked to distribute enough to meet minimum normal requirements, but to retain sufficient material to take care of emergency requirements, depending on the location of actual insect outbreaks.

Each company is requested to assure that its salesmen and field representatives avoid encouraging farmers or dealers to buy excess stocks of insecticides, which might result in serious injury to others requiring materials to combat actual insect infestations.

Sufficient arsenic is being made available to manufacturers currently to produce a volume of arsenical insecticides more than equal to the average annual consumption.

PRICE CHANGE IN EXTRACTED HONEY.---On November 27, 1942, the Price Administrator, with the approval of the Secretary of Agriculture, issued MPR-275, dealing with the price of honey. This order authorized a change in the ceiling price of

honey and reflects a price to the producer equal to 112.2 percent parity. The action will, it is believed, restore honey to the list of commodities available on store shelves. The earlier price which became effective in March 1942 was so low that it left available supplies of honey in the beekeepers' hands. The new price of 12 cents per pound for Grade U. S. No. 1 extracted honey in bulk should be beneficial not only to consumers of honey but also to the beekeeping industry in general.

BEEKEEPERS CAN DRAW ON 1943 AND 1944 SUGAR ALLOWANCES FOR WINTER FEEDING.—On November 28, 1942, the Office of Price Administration announced that beekeepers who have exhausted their 1942 provisional allowance of sugar were authorized by OPA to draw upon their 1943 and 1944 allowances to the extent of 15 pounds per colony for winter feeding.

This action is taken because the fall flow of honey was below expectations and as a result some colonies will not have food enough to carry them the winter without a supplementary sugar allotment.

The amendment also authorizes a beekeeper to draw his entire annual provisional sugar allotment in one or more installments, at his convenience. Hitherto the regulation limited the amount of the annual provisional allowance which could be obtained in a two-month period.

OCCUPATIONAL DEFERMENT OF GOVERNMENT EMPLOYEES.—Directive No. XV issued by the Chairman of the War Manpower Commission on December 2, 1942, rescinded the directive effective November 17, 1942, concerning requests for occupational deferment of officers and employees of executive branches of the Federal Government. This directive removes restrictions on presenting requests for occupational deferment contained in the rescinded order.

SOLDIERS OVER 38 OR THEIR EMPLOYERS MUST INITIATE ACTION TO HAVE THEM RETURNED TO ESSENTIAL WAR WORK, INCLUDING AGRICULTURE.—A release from the Office of War Information under date of December 27 states:

"Employers and soldiers themselves must initiate action to obtain honorable discharges from the Army of over-38 soldiers to return to essential jobs in war industries, including agriculture . . ."

NEW BASIS FOR DETERMINING ESSENTIAL FARM WORKERS.—To give immediate effect to the intention of Congress as expressed by the modification of Section K of the Selective Service Act, the Selective Service System has issued new directives to local boards in reference to the deferment of essential farm workers. Those who receive the War Letter are probably familiar with these through announcements in the local press. For ready reference, however, there is quoted below an approved statement which was released by the Department on December 14, 1942.

"A new Selective Service release to local boards defining essential farm products and establishing 'factors' to determine what workers are essential, and hence to be classified in 2-C and 3-C, the new agricultural classifications, has been made public.

"In accordance with revised regulations and as rapidly as possible, local boards are directed to classify or reclassify in Class 2-C or Class 3-C all registrants who are necessary to and regularly engaged in an agricultural endeavor essential to the war effort.

"The release supersedes four previous releases sent to local boards on the subject of farm deferments, and 'amends in its entirety' the last previous release, which was issued to call to the attention of draft boards the agricultural provisions of the Teen-Age Draft Act of last month.

"Production of 16 war units will be required within a 'reasonable period', under the definitions set up by the Department of Agriculture, and approved by the War Manpower Commission, for the classification of a farm worker as essential. The order explains that a war unit is a measure of production of essential farm products. Essential farm products are given a relative value in terms of war units. The following, for example, are each equivalent to one war unit:

- '1 milk cow
- 20 feedlot cattle
- 1 acre in apples
- 5 acres in dry beans
- 15 acres in wheat
- 1 acre in carrots; etc.'

"The 'conversion factor' by which calculations may be made of the war units credited to a given farm worker, is defined as follows:

"The conversion factor is the percentage that a given product, whether it be a single animal or a single acre of special type production, bears to a war unit, for example:

- '1 acre of wheat is .07 of a war unit;
- 1 acre of cabbage is 1.00 of a war unit;
- 1 hog is .05 of a war unit; etc.'

"The number of acres given to a certain type of production or the number of animals of a specified type multiplied by the conversion factor results in the war unit value, for example:

'3 hogs multiplied by the conversion factor of .05 results in .15 war units;

19 acres of Irish Potatoes multiplied by the conversion factor of .50 is equivalent to 9.50 war units; etc.'

"An official list of essential farm products and war unit conversion factors has been made up and supplied to the local Selective Service Boards. It is anticipated that the list of products will be amended in the near future."

It is understood that beekeeping has been specifically recognized as one of the essential agricultural activities included in the official list and for which a war unit conversion factor has been supplied local Selective Service Boards. The conversion factor is 300 colonies of bees to equal one war unit.

The WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE is issued at irregular intervals as material thought to be of interest and value becomes available. It is not issued in a numbered series but can be referred to by date. There follows a list of the dates on which the preceding 20 letters were issued:

March 21, 1942	Oct. 22
" 27	" 24
April 21	" 28
May 16	Nov. 3 - Arsenical Insecticides
" 25	" 3 - Nicotine
June 10	" 9
" 17	" 28
Sept. 12	Dec. 5 - Cryolite
" 16	" 5 - Pyrethrum
" 23	" 8

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January 15, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From

Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

MAXIMUM PRICES ESTABLISHED FOR ROTENONE.---Maximum Price Regulation No. 298, issued January 7, 1943, by the Price Administrator, establishes maximum prices that may be charged by manufacturers and wholesalers for all rotenone products ranging from the imported root to the finished insecticides. The regulation deals with rotenone, pure rotenone, rotenone powder, rotenone resins, liquid extracts, technically pure rotenone, and solvents of rotenone. In general the order provides for continuing the maximum prices paid for rotenone at approximately the same level as those of the last season, following the request made last March to manufacturers and wholesalers by the Office of Price Administration. The maximum price for 5% rotenone root will be 35 cents. The maximum price established for imported roots is in general accord with the Peruvian-American agreement with a differential of 1-1/4 cents to cover freight, insurance, and related costs. Under the terms of the order, the maximum price for standard rotenone-bearing roots imported for grinding will be approximately 23-1/2 cents.

Copies of the order are being made available for distribution to those who receive the War Letter.

CHLORINATED HYDROCARBON SOLVENTS ORDER AMENDED.---General Preference Order M-41 governing Chlorinated Hydrocarbon Solvents was amended by the Director General for Operations, War Production Board, on January 9, 1943. Chlorinated hydrocarbon solvents mean: Carbon tetrachloride, trichlorethylene, perchlorethylene, ethylene dichloride, and mixtures containing these materials that are suitable for approved uses. The order designates priority ratings for the more frequent uses for the materials. The highest of these ratings is A-10. Included among the uses with highest priority is "Fumigation of stored products, including grain." Provision is made for the Director General for Operations to give priority ratings higher than those established in the order and to authorize uses other than those specifically stated in the order.

Except as authorized by the Director General for Operations or the completion of a purchaser's certificate no person shall deliver or receive chlorinated hydrocarbon solvents for uses other than those which have a priority rating of A-10 or higher. The order also provides that no person shall accumulate inventories in excess of a 30-day supply at the expected rate of use or resale.

Under the terms of the amended order where any chlorinated hydrocarbon solvents are required for use in insect control, other than fumigation of stored products, approval for such use should be secured in advance. Advance approval is also needed where a rating higher than A-10 is required to secure material for fumigation of stored products, including grain, should unforeseen conditions develop and make it essential that such a higher rating is necessary to procure material for that purpose.

QUININE ORDER AMENDED.---Conservation Order M-131 dealing with quinine and other drugs extracted from cinchona bark was amended by the Director General for Operations, War Production Board, January 9, 1943. The use of quinine, except as required by licensed pharmacists to fill individual prescriptions; the use of totaquine; and the use of cinchona bark, except for manufacture of three quinine compounds and totaquine for purposes other than as anti-malaria agent is prohibited. The order requires all sales, transfers, or delivery of the regulated products, except those to the ultimate consumer, shall be made only after the receiver has executed a certificate saying he will use the material only for authorized use and that he is familiar with the terms of the conservation order. The wording of the certificate differs with the three products regulated.

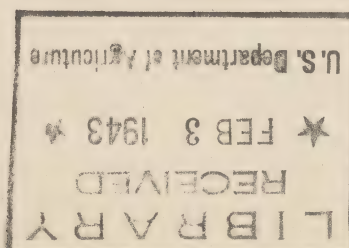
The order conserves available supplies of these materials for use in treating an insect-borne disease.

TRANSFER OF CERTAIN TYPES OF FARM MACHINERY AUTHORIZED.---Supplement Order 3 of Rationing Order C on Farm Machinery and Equipment, issued January 11, 1943, by Special War Board Assistant, Department of Agriculture, authorizes the transfer of farm machinery listed in Schedule I that was manufactured prior to the effective date, or in compliance with, orders governing their distribution. Transfers are to be made with advance approval and in accordance with a distribution plan. Among the items included in Schedule I are: Power sprayers, traction sprayers, power spray pumps, power dusters, and traction dusters.

USE OF TANK CARS CARRYING INSECTICIDES.---Transportation Request No. 1, issued January 9, 1943, by the Director General for Operations, War Production Board, pursuant to War Production Board Certificate 27, directs that persons engaged in producing, transporting, or distributing specified materials commonly moved in tank cars shall arrange for such common use of tank cars as to attain the most efficient utilization of them. The materials affected by the order are listed in Schedule X and include carbon tetrachloride, creosote, and formaldehyde. The order provides that all persons effecting purchases, sales, exchanges, or loans of products or arrangements for the joint use of tank cars shall promptly inform the Director General for Operations, War Production Board.

HONEY PRICE ORDER AMENDED.---On January 13, 1943, the Price Administrator issued two amendments to Maximum Price Regulation 275, as Amendments 1 and 2, which shall become effective January 19, 1943. These amendments deal with the price of extracted honey. Amendment 1 relates to the cost increase for honey. Amendment 2 deals with records and reports. The cost increase per pound for honey shall be the difference between 11-8/10 cents and the seller's "average weight cost" per pound for honey purchased during the "base period". Where the "average weight cost" cannot be computed by the procedure established due to the absence of transactions during the "base period", it is established as 5-6/10 cents. The order also provides for cost increase for transportation.

These amendments extend and clarify procedures established in the order as issued November 27, 1942, and referred to in the War Letter for January 9, 1943.



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Library, U. S. Dept. of Agriculture, January 26, 1943

WASHINGTON, D. C.

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

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From

Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

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PYRETHRUM FLOWERS, ORDER GOVERNING PRICE OF IMPORTATIONS AMENDED.---Under date of January 20, 1943, the Acting Administrator, Office of Price Administration, issued amendment 92 to supplemental regulation 14 of General Maximum Price Regulations, adding a new subparagraph (58) on pyrethrum flowers. This paragraph establishes the maximum price for imported pyrethrum flowers under War Production Board directive. It provides that the maximum price shall be the total landed costs to the importer, plus any actual transportation costs with respect to shipment within the continental United States.

It is understood that this amendment will not affect, in any appreciable degree, the price of the finished produce and sold for insecticidal use.

LOW GRADES OF TOBACCO RESERVED FOR PRODUCTION OF INSECTICIDES.---On January 20, 1943, the Secretary of Agriculture issued Food Distribution Order No. 9, effective January 22, 1943, which provides for reserving low grades of tobacco for the production of insecticides. This order requires that tobacco of specified grades be sold only to manufacturers of nicotine sulphate and nicotine alkaloid. The grades of tobacco covered by the order are:

The following grades of fire-cured and dark air-cured tobacco produced in Kentucky and Tennessee: X3M, X3G, X4F, X4FV, X4D, X4M, X4G, X5F, X5FV, X5D, X5M, X5G; Nondescript offered for sale on the auction markets for Eastern Fire-cured tobacco, Type 22; Western Fire-cured tobacco, Type 23; and Green River dark air-cured tobacco, Type 36.

The purpose of the order is to augment supplies of insecticides needed to help in the food production program for the current season.

MOLASSES FOR USE IN INSECT CONTROL.---On January 21, 1943, the Director General for Operations, War Production Board, amended General Preference Order M-54 dealing with molasses. The amended order requires that no deliveries of molasses shall be made or accepted unless the same has been specifically authorized by the Director General for Operations in accordance with procedures prescribed in the order. Exceptions to this requirements are made for certain specified uses, one of which is the use of molasses in insect control. Purchasers who require molasses for insect control may procure it without specific authorization in amounts used or consumed during the same calendar quarter for 1942 after having manually signed a certificate to the effect that the amount delivered from all sources and on hand is not in excess of such an amount.

Under the terms of the order those who used molasses for insect control in 1942 can secure 100% of the quarterly supply for last year during 1943.

BENTONITE AND PYROPHYLLITE EXEMPTED FROM INVENTORY RESTRICTIONS.--On January 15, 1943, the Director General for Operations, War Production Board, amended General Inventory Order M-161 exempting from inventory provisions certain materials. Among these are bentonite, kaolin, pyrophyllite, and borax.

Under this amendment the delivery and acceptance of these materials may be made even in amounts in excess of a practical working minimum.

INCREASES OF MATERIALS FOR MANUFACTURE OF CERTAIN FARM MACHINERY, EQUIPMENT, AND ATTACHMENTS AUTHORIZED.--Under date of January 19, 1943, the Director General for Operations, War Production Board, amended limitation order L-170, which defines the amount of critical materials which may be used in the manufacture of farm machinery, equipment, attachments, and repair parts thereof. The amount of materials that may be used for machinery used in pest control remains substantially the same. The production of sprayers and dusters continues in the class of "C" producers. The production for the period November 1, 1942, to October 31, 1943, in terms of percent for the years 1940 and 1941 for various types of equipment follows:

	<u>Percent</u>
Power Sprayers	43
Traction Sprayers	21
Hand sprayers with tank, barrel, knapsack (over one quart but less than 6 gallons capacity)	9
Sprayers with tank, barrel, and knapsack (over 6 gallons capacity or more)	36
Power Spray Pumps	23
Power Dusters	19
Traction Dusters	23
Hand Dusters, for agricultural purposes	66
Beekeeping supplies, except hives	38
Beehives	57

(Attachments for these items, in terms of net pounds shipping weight, are the same percentage quota as the items themselves.)

COPPER CONSERVATION ORDER AMENDED.--Under date of January 20, 1943, the Director General for Operations, War Production Board, amended Conservation Order M-9-c which deals with the conservation of copper. This document is a restatement of amendment 2 to Conservation Order M-9-c as amended December 26, 1942, and reflects the order in its complete form as of January 20, 1943.

The amendment of December 26, 1942, which prohibited the use of copper for the manufacture of insect screens and screening and termite shields, except as required for military use, was referred to in the War Letter for January 9, 1943.

REQUIREMENTS FOR EXPORT LICENSE MODIFIED.--Under date of January 19, 1943, the Chief of Office of Exports issued amendment No. 117 to the requirements for the application of individual licenses for export. The amendment, with certain specified exceptions, requires that a separate and complete application must be submitted for each commodity to be exported to each consignee in each country of destination. Items for which individual applications for licenses are to be made include molasses, honey, cryolite, and industrial chemicals (except commodities requiring certificate of necessity).

REVISED IMPORT ORDER CONTINUES CONTROLS ON CERTAIN INSECTICIDES.---General Import Order M-63, amended January 18, 1943 (effective December 28, 1942), by the Director General for Operations, War Production Board, includes amended lists of materials covered by the order. The revised lists continue to include pyrethrum, rotenone, and red squill among the imports which cannot be released for disposal, processing, or transfer without approval, except to United States Governmental Departments, agencies, or corporations. Crude, seed, button, and stick lac are also similarly controlled.

Among the materials included under lists II and III for which it is unnecessary to secure release for withdrawals from customs are: coconut oil, silk cocoons, silk waste, wild silk, honey, and sesame seed and oil as well as a goodly number of plant products which are covered by plant quarantine regulations because of pest risk.

USE OF SODIUM CHLORATE AS A WEED KILLER.---The following statement in reference to the availability of sodium chlorate for use as a weed killer is quoted from the official weekly bulletin of the Office of War Information for January 13, 1943:

"WEED KILLER SUPPLY MEETS MAJOR NEEDS

"Sodium chlorate will be available this year for weed eradication in quantities sufficient to care for major needs without rigid State quotas. The chemical will be distributed in the regular commercial channels as equitably as possible according to the demand and need.

"Since the supply is not yet equal to the demand, the material is still subject to WPB allocation, but the situation is easier than a year ago and, barring unforeseen contingencies, there will be a comfortable quantity for use.

"State and local authorities responsible for the purchase of sodium chlorate are asked to take steps to see that orders are placed in an orderly and regular manner. There is no occasion for premature buying or for hoarding. Reasonable notification of intention to order is recommended as a means to assist manufacturers in arranging deliveries.

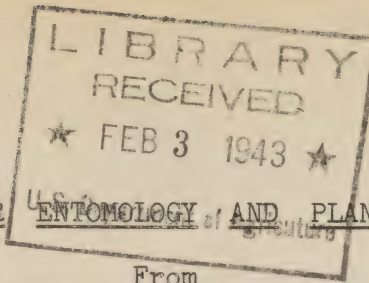
"Licenses obtained from the United States Bureau of Mines for purchase and use of this chemical are on an annual basis and must be renewed or obtained in 1943. This can be done through the local explosives licensing agent in each county, usually located at the county seat.

"Prices of sodium chlorate, covered by OPA maximum price regulations, will remain the same as last year."

FOOD PRODUCTION ADMINISTRATION RESPONSIBLE FOR CONTROL OF FARM MACHINERY AND EQUIPMENT.---On January 23, 1943, the Acting Secretary of Agriculture issued Amendment 2 to Food Production Order 3, effective January 26, conferring upon the Director of Food Production or, in his absence, the Acting Director the administration of farm machinery and equipment rationing program established by Rationing Order C.

Prior to this the administration of the farm machinery and equipment rationing program was carried out by a "Special War Board Assistant" designated by the Secretary of Agriculture.

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January 27, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Bureau of Entomology and Plant Quarantine
Agricultural Research Administration
U. S. Department of Agriculture, Washington, D. C.

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ROTENONE CONSERVATION ORDER AMENDED.--The amended Conservation Order M-133 dealing with rotenone, issued by the Director General for Operations, War Production Board, under date of January 23, 1943, was made public by publication on January 26. The amended order redefines rotenone, places restrictions on delivery, use, production, packaging, prescribes new forms and procedures for filing reports and making application for allocations of materials, and requires users to report supplies.

As used in this order rotenone and rotenone insecticides are defined as follows:

- "(1) 'Rotenone' means the active insecticidal ingredients of the roots of derris, cube, barbasco, tuba, or timbo. The term includes:
 - "(i) Crude rotenone in the form of root or of root which has been dried, broken, shredded, cut, or chipped;
 - "(ii) Processed rotenone in the form of finely ground or powdered crude rotenone; also in the form of liquid or solid extracts (or resins) obtained from crude rotenone.
- "(2) 'Rotenone insecticide' means any compound containing rotenone combined with other liquid or dry materials, whether active or inert; provided that such compound is suitable for use as an insecticide."

For the purpose of the order an importer is any person engaged in the importation of rotenone and a processor is any person engaged in producing or selling processed rotenone in any of the forms described in the order.

Under the terms of the order no importer or processor shall deliver or accept delivery of any rotenone unless he has reason to believe that it will be used and delivered in accordance with the requirements of the order.

The order establishes procedures for allocating rotenone to processors on a monthly basis, but provides that the Director General for Operations may at any time issue directions with respect to deliveries to be made.

The order requires that no deliveries of rotenone shall be made until a certificate has been executed by the person to whom delivery is to be made. The general form and requirement of the certificate to be signed by the receiver are set forth in the order. Important features of the certificate are:

- (a) that the material delivered will be used or sold for use only for the purposes permitted under the terms of the order;

- (b) that the amount of the order will not be in excess of a practical minimum working inventory;
- (c) description of product and quantity;
- (d) that where rotenone is delivered for resale the percentage of rotenone to be included in the manufactured product be stated; and
- (e) that where the material is purchased for use the crop on which it will be used, the pest to be controlled, and the acreage or number of animals to be treated be stated.

The order provides that no person shall use rotenone or any rotenone insecticide except for one or more of the following purposes:

"(1) Use in the protection of the following food crops against the following insects, or the manufacture of any preparation for such use:

"(i) Peas - protection against the pea weevil and pea aphid.

"(ii) Beans - protection against Mexican bean beetle.

"(iii) Cole Crops - other than cabbage, including: broccoli, brussels sprouts, cauliflower, kohlrabi, mustard, kale, turnips, and collards - for protection against caterpillars and aphids.

"(iv) Sweet corn - for protection against the European corn borer.

"(2) Use on cattle for the specific control of the cattle grub (ox warble) or short-nosed cattle louse, or the manufacture of any insecticide for such use.

"(3) Any other specified use, where specifically authorized or directed by the Director General for Operations."

The order provides that no person shall manufacture or process any rotenone insecticide in the form of dust or powder with a content of more than one-half of one percent rotenone unless otherwise specifically authorized or directed by the Director General for Operations. In carrying out this provision it is specified that it does not prevent the manufacture or preparation of a dust having a rotenone content of one-half of one percent in accordance with standard commercial practices, provided that the actual variation of rotenone content does not exceed 10 percent, and that this provision shall not prevent the use in the manufacture of any rotenone insecticide of other active ingredients, activators, or wetting agents. The manufacture or processing of any rotenone insecticide incorporating pyrethrum is, however, prohibited without the specific approval of the Director General for Operations, War Production Board.

The order prescribes that no processed rotenone or rotenone insecticide shall be delivered in any package by importer, processor, manufacturer, or distributor unless such package clearly displays on the label thereof or on a suitable tag affixed thereto a statement that the use of the material is restricted by Conservation Order M-133 as amended January 23, 1943, and can be used only for the purposes enumerated in the order, and these are to be enumerated on the label or accompanying tag.

The order prescribes that each person other than the Army or Navy of the United States, United States Maritime Commission, or War Shipping Administration, who, on the close of business December 31, 1942, owned more than 500 pounds of rotenone or more than 5,000 pounds of rotenone insecticides, or a combination of the two, having a rotenone content of more than 500 pounds, shall file an inventory statement with the Chemicals Division, War Production Board, on or before February 10, 1943. The form, PD-785, on which such inventory statement is to be made, may be secured from the War Production Board.

The order requires each supplier to notify his regular customers as soon as possible of the requirements of the order, but provides that failure to receive notice shall not excuse any person from complying with the terms of the order.

The order includes the usual provisions for records, reports, applicability of priority regulations, violations, appeals, and a statement on how communications to the War Production Board on the order should be addressed, namely, War Production Board, Chemicals Division, Washington, D. C., Ref: M-133.

Comments on the Amended Rotenone Order

As indicated in the above abstract the order makes provision for the Director General for Operations, War Production Board, to authorize the use of rotenone for purposes other than those specifically set forth in the order. We are informally advised that authorization for additional uses will depend to a large extent, if not entirely, upon the availability of supplies.

The requirement that rotenone dusts be standardized to contain one-half of one percent rotenone makes it necessary for entomologists to carefully review their recommendations on the rate of application of dusts containing rotenone. The purpose of the order is to conserve rotenone supplies and to make them go as far as possible. Experiments with pests such as the Mexican bean beetle have shown that effective control can be obtained by using one-half of one percent dust without increasing the normally recommended rate of application. Reduction in the rotenone content of dusts used for this purpose should, therefore, conserve considerable quantities of rotenone. Experiments and experiences in the control of certain other insects, such as the pea weevil, indicate that dusts containing one-half of one percent rotenone applied at the rate of application recommended for dusts containing approximately three-fourths of one percent rotenone may not secure effective control. While it will be desirable in such cases to increase the rate of application so that the amount of rotenone applied will be the same as now recommended, it is believed that the standardization of the dust to one-half of one percent will result in conservation, when all approved uses for rotenone dust are considered.

The amended order does not permit the general use of rotenone on all crops that may be grown in farm, community, and home gardens; it does not restrict its use, however, to the protection of commercial crops. The crops and pests for which rotenone may be used are restricted, but restrictions do not extend to size of planting of the crop or whether it is being produced for sale.

It is believed that entomologists can assist in the conservation of this scarce material by acquainting users of rotenone with the requirements of the order. Effort will be made to secure copies of the full text for distribution to those who receive the War Letter.

~~CONFIDENTIAL~~

February 16, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

LIBRARY
CURRENT SERIAL RECORD

AUG 23 1943

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

U. S. DEPARTMENT OF AGRICULTURE

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

LABEL FOR 0.5 PERCENT ROTENONE DUST.--The Insecticides and Fungicides Unit, Chemicals Division, War Production Board, forwarded to manufacturers of insecticidal dusts containing rotenone information aimed to help them in preparing labels for their products. Copy of the letter to the Industry of February 16, 1943, and the accompanying label are quoted below:

"WAR PRODUCTION BOARD
Washington, D. C.

"In Reply Refer To:

"1636 Temporary 'S'
Inorganics Section
Chemicals Division

"Gentlemen:

"The amended rotenone order prescribes certain requirements as to labeling. With the thought of aiding the preparation of labels for insecticidal dusts containing rotenone, we have prepared a sample label form which may be helpful in your preparation of the necessary labels. This form gives labeling requirements acceptable to the War Production Board, and the basic information needed to meet the labeling requirements of the Insecticide Act.

"In view of the desirability of making every effort to conserve rotenone we asked the Bureau of Entomology and Plant Quarantine to prepare information as to directions for the use of 0.5 per cent dust. The directions for use included in the accompanying sample label form were supplied by them with the indication that they are in general agreement with the recommendations the Bureau will make on the rate of application of 0.5 per cent rotenone dust for the control of the insects listed and for which the use of rotenone is authorized in the Order. It is urged that these directions as to use be made a part of the label and that they be set up in substantially the form suggested.

"Very truly yours

"W. H. Moyer, Chief
Insecticides and Fungicides Unit"

"(Label Form)

"INSECTICIDAL DUST CONTAINING
0.5 ROTENONE

"ACTIVE INGREDIENTS

Cube Resins _____%

"INERT INGREDIENTS

Total _____%

"Information as to Use

"This product is to be used for the control of the pea weevil and the pea aphid on peas; the Mexican bean beetle on beans; caterpillars, turnip and spinach aphids on cole crops (other than cabbage), such as broccoli, brussels sprouts, cauliflower, kohl-rabi, mustard, kale, turnips and collards; and the European corn borer attacking sweet corn.

"Directions

"The kill of the insect or the efficiency of control depends largely upon the thoroughness of application, and the correct dosage per acre.

"For the control of the specified insects, it is recommended that this dust be applied as follows:

"Pea weevil	20 to 25 pounds per acre
Pea aphid	35 to 40 pounds per acre
Bean beetle	15 to 20 pounds per acre
Cabbage caterpillar	15 to 20 pounds per acre
Turnip aphid	15 to 20 pounds per acre
European corn borer	45 to 50 pounds per acre

"The material should be applied when there is little air movement, and the efficiency of the treatment will be increased by the utilization of a trailer or an apron on the duster.

"The use of this material is restricted by WPB's Conservation Order No. M-133, as amended January 23, 1943, to the following uses:

1. Peas--protection against the pea weevil and pea aphid.
2. Beans--protection against Mexican bean beetle.
3. Cole crops--other than cabbage, including: broccoli, brussels sprouts, cauliflower, kohl-rabi, mustard, kale, turnips, and collards--for protection against caterpillars and aphids.
4. Sweet corn--for protection against the European corn borer.
5. Cattle--for the specific control of cattle grub (ox warble) or short-nosed cattle louse."

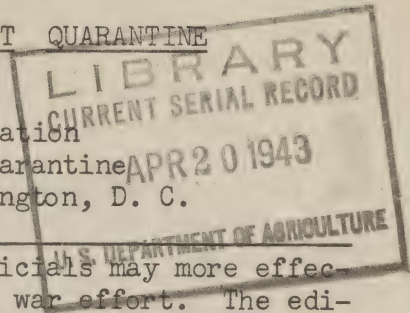
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~~Crop~~

March 23, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

ROTENONE FOR EXPERIMENTAL PURPOSES.--The Chemicals Division of the War Production Board assures that every consideration will be given to allowing small lots of rotenone for use for experimental purposes. The Conservation Order M-133, dealing with rotenone, as amended January 23, 1943, does not provide for the use of rotenone for experimental purposes other than on crops and for pests specifically referred to in the order. Entomologists may desire to secure small quantities of rotenone for experimental purposes on other insects and for other crops. To procure supplies for this purpose we are advised by the War Production Board that the procuring officer should "apply to his regular supplier and indicate on the certification that the material is to be used for experimental purposes. In the event that the supplier is a processor, as defined by the order, the certification is then submitted to the War Production Board for authorization to ship."

SALE, LEASING, AND RENTING OF CERTAIN PRIVATE AIRCRAFT CONTROLLED.--Limitation Order 262 issued by the Director General for Operations, War Production Board, on January 26, 1943, prohibits the sale, lease, trade, and rental of single-engined aircraft of 500 horsepower or less without specific authorization of Director General for Operations, War Production Board. Persons affected by the order are to execute and file reports and questionnaires as are prescribed by the War Production Board. Communications in reference to the order should be addressed to War Production Board, Aircraft Production Board, Washington, D. C.

Under this order private aircraft used for crop dusting and distributing of bait is being classified as to model and type and appraised as to usefulness for training pilots and related activities of a direct war nature. Those suitable and required may be requisitioned for these purposes. Need for aircraft to distribute insecticides will receive consideration.

RESTRICTIONS ON ANTIMONY AMENDED.--On March 8, 1943, the Director General for Operations, War Production Board, amended General Preference Order M-112, dealing with antimony. Under the amended order antimony in any of the forms may be delivered in lots of 2,240 pounds or less, provided that the total quantity which any person may receive in one calendar month from all sources of supply shall be limited to the above amount.

This amendment liberalizes the earlier restrictions on antimony and should provide quantities of antimony needed in making compounds which have insecticidal use.

ORDER CONTROLLING FORMALDEHYDE AMENDED.---On February 20, 1943, the Director General for Operations, War Production Board, amended allocation order M-25 dealing with formaldehyde, hexamethylenetetramine, and pentaerythritol. The amended order provides that on and after March 1, 1943, no supplier of formaldehyde shall use or deliver material and no person shall accept delivery from a supplier except as specifically authorized by the Director General for Operations. The applications for delivery must specify the use for which the material is intended. Among the permitted uses are insecticides and fungicides. The order permits, however, delivery of 555 pounds or less of formaldehyde during any calendar month without specific authorization, provided specific authorization has not been given to use or accept delivery during such month and provided the material is not used in the manufacture of resins for protective coatings, plastics, or adhesives.

LEAD AVAILABLE FOR THE MANUFACTURE OF LEAD ARSENATE.---On February 2, 1943, the Director General for Operations, War Production Board, amended Conservation Order M-38-c, dealing with lead. The amended order places lead for the manufacture of lead arsenate for insecticidal use in List B, which exempts it from the provisions and restrictions contained in the conservation order to the extent that the use of any less scarce material is impracticable. This has the effect of making lead available for the manufacture of lead arsenate without restrictions.

CONSERVATION ORDER FOR COPPER AMENDED.---On February 26, 1943, the Director General for Operations, War Production Board, amended Conservation Order M-9-c, dealing with copper. The amended order prohibits the manufacture, processing, assembling, or furnishing copper or copper products or copper base alloy products for the use of insect screens and screening and for termite shields. The order permits a military exemption for the use of copper in insect screens when the screening has been manufactured prior to February 28, 1943.

MAXIMUM PRICES FOR LEAD ARSENATE.---On February 2, 1943, the Administrator, Office of Price Administration, amended Maximum Price Regulation 315 dealing with lead arsenate, establishing maximum prices that may be charged for this commodity. The order is effective February 8, 1943. Under the terms of the order manufacturers' prices for sale in quantities of 96 pounds or more, including the cost of transportation to the purchaser, are set forth as follows:

STANDARD LEAD ARSENATE POWDER		
Item	Maximum prices per pound to other manu- facturers or distributors	Maximum prices per pound to all other purchasers
3-pound bags or larger:		
Carlots.....	\$0.11	\$0.11½
Less than carlots....	.11½	.12
1-pound bags		
Carlots.....	.16	.20
Less than carlots....	.16½	.20½
1-pound cartons:		
Carlots.....	.18	.22
Less than carlots....	.18½	.22½
½-pound cartons:		
Carlots.....	.21	.25
Less than carlots....	.21½	.25½

STANDARD LEAD ARSENATE PASTE

Item	Maximum prices per pound to other manu- facturers or distributors	Maximum prices per pound to all other purchasers
Carlots.....	\$0.05-3/4	\$0.06
Less than carlots....	.06	.06 $\frac{1}{4}$

BASIC LEAD ARSENATE POWDER

3-pound bags or larger:		
Carlots.....	\$0.11 $\frac{1}{2}$	\$0.12
Less than carlots..	.12	.12 $\frac{1}{2}$
1-pound cartons:		
Carlots.....	.18 $\frac{1}{2}$.22 $\frac{1}{2}$
Less than carlots..	.19	.23

Sales in quantities of less than 96 pounds may be made at the above maximum prices f.o.b. the manufacturer's factory or warehouse.

Manufacturers sell most of their products to distributors, but about 25 percent of their sales are made to retail dealers and to large growers. The regulation establishes prices for both classes of purchasers and maintains the half-cent differential between the two classes. Wholesale distributors are required to adjust their prices by the exact dollar-and-cent adjustment in manufacturers' prices, but stocks on hand before February 8, 1943, may continue to be sold at ceiling prices established by the General Maximum Price Regulation.

On February 23, 1943, the Administrator, Office of Price Administration, issued Amendment 1 to Maximum Price Regulation 315, dealing with lead arsenate, the amendment to become effective March 1. This amendment modifies the procedures to be followed by manufacturers in notifying the distributor or dealer to whom he sells of the price of delivery, and provides that the manufacturer shall notify each distributor that he shall supply the copy of the same written statement to each dealer at or before the time of first delivery to the dealer after the price reduction or increase becomes effective. The type of written statement that shall be used is specified in the order.

METHOD OF DETERMINING PRICES OF AGRICULTURAL INSECTICIDES AND FUNGICIDES.--

On February 2, 1943, the Administrator, Office of Price Administration, amended the section of General Maximum Price Regulation 260 dealing with agricultural insecticides and fungicides, the amended order to become effective February 3, 1943.

The amended order provides that the manufacturer shall compute the difference in cost of ingredients between the new product and a comparable product most like the new one in kind and cost of materials and adjust the price of the new product by the amount of difference. The new method permits determining maximum prices for agricultural insecticides and fungicides whose formulas have been changed by war-time shortages as have been established for manufacturers. By this method manufacturers may apply prices to new products without petitioning the Office of Price Administration for a determination of the price.

TRANSPORTATION COSTS OF EXTRACTED HONEY.—On February 22, 1943, the Administrator, Office of Price Administration, amended Maximum Price Regulation 275 to provide methods of calculating transportation cost increases for extracted honey. Sellers of extracted honey who failed to make purchases of their raw honey during either or both of the two periods set forth in the honey order for determining the increased freight costs are provided with the new method of calculating or permitting transportation cost increases. The amended order is effective February 27, 1943. It should not increase the general level of honey prices to the consumer.

ORDER DEALING WITH FARM MACHINERY EQUIPMENT AND REPAIR PARTS LIBERALIZED.—War Production Board Limitation Order L-170, dealing with farm machinery and equipment and attachments and repair parts was amended January 29, 1943; two amendments on February 4, 1943; February 12, 1943; and March 6, 1943. All these amendments have the effect of liberalizing the restrictions placed by this order. The amendment issued March 6, 1943, by the Director General for Operations, War Production Board, includes the following of interest to entomologists and plant quarantine officials:

The restrictions of the order will not apply to manufacturers of beehives. Producers of Class C group may produce quotas for new machinery, equipment, and attachments, expressed as percentage of the weight of each item during 1940 or 1941, whichever is the higher, as follows:

Power sprayers.....	95 percent
Traction sprayers.....	21 "
Hand sprayers with tank, barrel, knapsack, etc., capacity of 1 quart or over but less than 6 gallons.....	28 "
Sprayers with tank, barrel, knapsack, etc., capacity of 6 gallons or more.....	36 "
Power spray pumps.....	23 "
Power dusters.....	55 "
Traction dusters.....	75 "
Agricultural hand dusters.....	100 "
Beekeeping supplies, except hives..	100 "

Producers of Class B can produce on the same ratio:

Agricultural hand dusters.....	18 percent
Beekeeping supplies, except hives..	100 "

Class A producers of beekeeping supplies can also produce 100 percent.

The expiration date of the Limitation Order is changed to September 30, 1943, from October 31, to conform with the calendar quarters for allotments of materials. Increases in the quotas of certain types of machines needed for insect control have in some cases been more than 100 percent and in all cases the authorized increases have been substantial.

POWER SPRAY PUMPS RELEASED.---On March 13, 1943, the Director of Food Production Administration, Department of Agriculture, amended Food Production Order No. 3 dealing with farm machinery, to release power spray pumps.. Under this amendment manufacturers of power spray pumps may release 100 percent of their production under War Production Board Limitation Order L-170 and all inventory stocks produced under War Production Board Limitation Order L-26. The amendment is effective on March 13, and abolishes quotas previously set up. It permits county rationing committees to immediately ration power spray pumps and to issue purchase certificates, therefore, in accordance with the provisions of Food Production Order No. 3. Purchase certificates are still required before farmers can purchase power spray pumps. Farmers to whom purchase certificates will be issued are required, therefore, to locate the spray pumps they may wish to buy in dealers' hands before a purchase order is issued to them.

USE OF STEEL SHIPPING DRUMS FOR INSECTICIDES RESTRICTED.---On January 29, 1943, the Director General for Operations, War Production Board, amended Limitation Order L-197 dealing with steel shipping drums. This amendment includes restrictions and prohibitions on the use of steel shipping drums for insecticides. It provides that no person shall use any drum, new or used, for packaging the following products which he did not have packaged in drums prior to September 14, 1942. The governing dates in reference to insecticidal materials are, however, extended from the general date to November 14, 1942. The insecticidal products included under this restriction are:

- Arsenic trioxide
- Arsenical mixtures
- Calcium arsenate
- Copper sulphate
- Lime sulphur
- Paradichlorobenzene
- Sodium arsenate

The order also provides that no person shall pack certain products in drums, new or used, which were manufactured on or after September 14, 1942. Among these are:

- Formaldehyde
- Liquid insecticides, including fly sprays and livestock dip and spray (except those containing nicotine sulphate, arsenical cattle dips, and grain fumigants)
- Paris green
- Pyrethrum concentrates
- Rotenone

The order includes general exceptions which permit the use of drums for sale and delivery of commodities to the Army, Navy, Maritime Commission, Panama Canal, War Shipping Administration, and other Governmental agencies as may be designated. The provisions of the order do not apply to drums constructed wholly of heavier than 14 gauge steel or to drums constructed wholly of lighter than 20 gauge steel, having a capacity of more than 30 gallons.

CONSERVATION ORDER ON TIN CANS AMENDED.--On February 18, 1943, the Director General for Operations, War Production Board, amended Conservation Order M-81 dealing with cans. On March 12, 1943, this order was restated in completed form as of that date. As defined in the order "can" means any unused container which is made in whole or in part of tinplate, terneplate, blackplate, or waste, and which is suitable for packing any product. The order divides the uses for which materials may be supplied into 3 schedules. Schedules 2 and 3 contain certain items of direct interest to entomologists and pest control officials. The more important of these items and information in reference to them follow.

Except for purposes for the use of the Army, Navy, Marine Corps, Maritime Commission, War Shipping Administration of the United States, or for any agency purchasing for a foreign country, pursuant to the Act of March 11, 1941, packing quotas for items under Schedule 2 for food cans are:

Cans for honey--100% of the 1942 pack of cans of 60-pound size; can materials to be 1.25 tin, both body and ends. In the amendment of March 12, 1943, the packing quota is revised to unlimited.

The packing quotas specified in Schedule 3, Non-Food Cans, except for purposes of the Army, Navy, Marine Corps, Maritime Commission, War Shipping Administration of the United States, or for any agency of the United States purchasing for a foreign country, pursuant to the Act of March 11, 1941, are:

Bee feeder cans, friction top, for use in shipping bees--100% of the 1942 packing quota, cans of sizes 2, 2½, and 3; materials to be--body of the can, 0.5 tin; ends, chemically treated blackplate.

Cans for calcium cyanide--100% of the 1942 packing quota, cans of sizes 1 pound-2½pounds; materials to be--body of the can, special coated manufactured terneplate, the ends, blackplate.

Cans for carbon bisulfide--100% of the 1942 packing quota, cans of 1-pound size; materials to be--body of the can, special coated manufactured terneplate; the ends, blackplate.

Cans for chlorpicrin and related compounds--100% of the 1942 packing quota, cans of 1-pound size; materials to be--body of the can, special coated manufactured terneplate; the ends, blackplate.

Cans for nicotine sulphate--100% of the 1942 packing quota; can of 5-pound size; materials to be--body and ends, 1.50 tin. In the amendment of March 12, 1943, the packing quota is revised to unlimited.

GASTONIA, NORTH CAROLINA, REMOVED FROM CUSTOMS PORTS OF ENTRY.--On March 3, 1943, the President issued Executive Order 9308 revoking designation of Gastonia, North Carolina, as a customs port of entry. Revocation is to be effective as of March 3, 1943.

AIR BASE AT PRESQUE ISLE, MAINE, REDESIGNATED AIRPORT OF ENTRY.--On February 19, 1943, the Acting Secretary of the Treasury Department redesignated the air base at Presque Isle, Maine, as an airport of entry for civil aircraft and merchandise arriving from places outside of the United States.

PRIVILEGES TO CANADIAN NATIONALS.--On January 23, 1943, the Adjutant General, War Department, amended regulations safeguarding technical information in reference to the classification of visitors to provide that Canadian Nationals would be considered as and accorded the same privileges as citizens of the United States with respect to matters of visits to Government or commercial manufacturing establishments and experimental laboratories engaged in classified work or projects.

EXPORT CONTROL REGULATIONS REVISED.--On January 27, 1943, the Chief of Office of Exports issued a general revision to the regulations providing for export control. These revised regulations provide procedures for the issuance of general licenses, unlimited licenses, individual licenses, the export of technical data, procedure for clearance for exports to selected destinations, and general regulations governing exports. The general regulations prohibiting the exportation from the United States of many commodities and all technical data relating to those commodities to destinations except Canada (including that part of Labrador under Canadian authority) unless and until a license authorizing such exportation has been issued by the Office of Exports. Among the commodities the exportation of which is prohibited by this section are:

- Acetone
- Agricultural machinery and implements
- Barbasco
- Beekeeping supplies, including beehives, comb foundation, honey extractors, etc.
- Calcium arsenate
- Calcium cyanide
- Carbon bisulphide
- Carbon tetrachloride
- Castor oil
- Arsenious oxide
- Chloropicrin
- Copper fungicides
- Copper sulfate
- Diphenylamine
- Ethylene dichloride
- Ethylene oxide
- Methyl bromide
- Napthalene
- Paradichlorobenzene
- Paris green
- Pyrethrum extracts and pyrethrum flowers
- Rotenone
- Sodium cyanide
- Sulphur, crude, crushed, ground, refined, etc.
- Tartar emetic
- Tobacco extracts
- Citronella oil
- Cryolite, natural and artificial
- Cupric cyanide and cuprous cyanide
- Potassium cyanide
- Dichlorethyl ether
- Honey
- Agricultural insecticides in general and in addition to those mentioned
- Lac
- Lead arsenate

Pyrophyllite

Silk and silk machinery

Provision is made to issue unlimited licenses to foreign purchasing agencies for certain commodities to specific destinations.

Several subsequent amendments have been issued modifying requirements of licensing and other details. These have not changed the provisions dealing with commodities of special interest to entomologists.

QUININE ORDER AMENDED.--On January 27, 1943, the Director General for Operations, War Production Board, amended Conservation Order M-131, dealing with quinine, cinchona bark, and totaquine. The amended order provides that the order issued under date of January 9, 1943, shall not affect any transaction or any use of any anti-malarial agent manufactured on or before January 9, 1943, provided that a certificate, as prescribed in the order, shall be filed for each sale, transfer, or delivery.

The amended order is similar to the order issued under date of January 9 (see War Letter for January 15).

CONSERVATION ORDER FOR CHEMICAL FERTILIZERS REVOKED.--On January 27, 1943, the Director General for Operations, War Production Board, revoked Conservation Order M-231, dealing with chemical fertilizers. This subject has been reissued with amendments over the signature of the Secretary of Agriculture. Chemical fertilizers are now handled by the Department of Agriculture.

FRUIT AND VEGETABLE CONTAINERS STANDARDIZED.--On March 1, 1943, the Director General for Operations, War Production Board, issued Limitation Order L-232, dealing with fruit and vegetable containers. Wooden containers of all types used for shipping fresh fruits and vegetables are standardized. Types are reduced from several hundred to 72. The order is effective on March 4, 1943. The marketing and binding of boxes in such a way as to limit their reusability is prohibited. The order does not reduce the amount of containers available to users, but it will facilitate reuse and should increase the efficiency of container manufacturers.

DEFERMENT OF FARM LABOR.--The following summary on the recent orders which liberalized deferments for farm labor was issued by the Office of Information of the Department of Agriculture on January 25, 1943:

"Farm Deferment Standards Liberalized: Liberalization of the requirements for agricultural deferments has been announced by the Selective Service Bureau of War Manpower Commission.

"These new standards for the guidance of Selective Service local boards not only liberalize the application of the 'war unit' standard of production but include numerous additions to the list of essential crops for the production of which farmers may be deferred.

"Approved by the Department of Agriculture, the War Manpower Commission, farm organizations, and other interested groups, the revised guide provides that a local board would be justified in some cases in deferring an agricultural worker who produced as little as 8 war units of essential products. Heretofore, 16

units were considered a standard. While emphasizing that a national objective has been declared to be the production by as many farmers as possible of 16 or more war units, the revised guide cautions local boards against using the national objective as a rigid standard by which to measure deferments.

"Selective Service local boards also are advised that when they are of the opinion that agricultural workers who are not producing at least 8 war units at the time could produce them if employed elsewhere, the boards should notify the local employment office of the War Manpower Commission and allow 30 days for the placement of the workers on other farms. Also, agricultural workers will not be reclassified out of their deferred classification if they move from one necessary agricultural endeavor to another.

"The procedure local boards are to follow in granting deferments closely follows the procedure established in November when it was announced that Selective Service Regulations had been amended to provide:

"(a) In Class II-C shall be placed any registrant who has no grounds for deferment other than his occupation or endeavor and who is found to be necessary to and regularly engaged in an agricultural occupation or agricultural endeavor essential to the war effort.

"(b) In Class III-C shall be placed any registrant who is deferred by reason of dependency and who is found to be necessary to and regularly engaged in an agricultural occupation or agricultural endeavor essential to the war effort.

"These classifications remain in effect."

(Subsequent orders have made other changes dealing with agricultural workers, additional orders are under consideration, and legislation bearing on this general subject is before both Houses of Congress.)

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Library, U. S. Dept. of Agriculture,
WASHINGTON D. C.

April 21, 1943

~~CONFIDENTIAL~~ WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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ROTENONE ORDER AMENDED TO PROVIDE EXCEPTIONS FOR SMALL PACKAGES.---On April 17, 1943, the Recording Secretary, War Production Board, amended Conservation Order M-133, dealing with rotenone. It provides for the removal of restrictions on use and certification, required by the original order, of rotenone insecticides packaged in quantities of one pound or less where in solid form, or one pint or less where in liquid form. The exceptions as to package size will be applicable to rotenone insecticides in dealers' hands and permit the use of small packages of insecticides containing limited amounts of rotenone which have been previously manufactured and packaged for various uses, some of which are not provided for in the order as amended January 23, 1943. It is understood that there are many small packages of insecticides on dealers' shelves which include a number of ingredients other than rotenone and that the combinations are not generally applicable for the uses permitted in the previous order.

The amended order also adds a new section which provides that the War Production Board may at any time issue directions to processors with respect to the size of packages in which rotenone insecticides may be packed. While this section provides for issuing directions on package sizes it is understood that it is not now contemplated to issue any directions in reference to this in the immediate future.

MAXIMUM PRICES FOR ARSENICAL INSECTICIDES.---On March 31, 1943, the Administrator, Office of Price Administration, amended Maximum Price Regulation 315 which pertains to arsenical insecticides. The amended order specifies nation-wide dollars-and-cents maximum prices for manufacturers' sale of arsenicals, other than lead arsenate. It includes prices for all of the important arsenical insecticides at manufacturers' and distributors' levels. It includes tables giving the maximum price per pound at which the materials may be sold to other manufacturers and the maximum price per pound at which the materials may be sold to dealers. These prices are based on the size of the containers and shipments. Among the arsenicals for which prices are included in the table are standard lead arsenate powder, standard lead arsenate paste, basic lead arsenate powder, calcium arsenate, Paris green, zinc arsenite, London purple, magnesium arsenate, and zinc arsenate. It includes definitions for these various materials.

Copies of the full order have been received and will be made available to those who receive the War Letter.

MAXIMUM PRICES ESTABLISHED FOR COPPER SULPHATE.---On March 29, 1943, the Administrator, Office of Price Administration, issued Maximum Price Regulation 354 dealing with copper sulphate. This regulation applies to various grades of copper sulphate including those referred to as crystal snow, powdered, and monohydrated. It includes a general statement which defines the applicability of the regulation and its relation to the general maximum regulation. It establishes procedures for determining maximum prices for copper sulphate and includes tables giving the maximum price that may be charged in various areas for various grades and quantities. Where large quantities are involved the prices are stated as f.o.b. the manufacturing plant.

CONSERVATION AND LIMITATIONS ON USE OF HONEY.---On April 6, 1943, the Secretary of Agriculture issued Food Distribution Order No. 47, dealing with the conservation and distribution of honey. This order supersedes General Preference Order M-118 of the War Production Board, except as to violations and other actions that may have been taken prior to the issuance of the new Food Distribution Order.

The order defines honey to mean honey in any extracted or comb form. It places the restrictions imposed on the use of honey under the Director of Food Distribution of the United States Department of Agriculture. The order is to be effective on the date of issuance--April 6.

On April 6, 1943, the Director of Food Distribution of the Department of Agriculture issued Amendment 1 to Food Distribution Order No. 47, giving quotas and prescribing regulations limiting the amount of honey that may be used in the manufacture of food products and in the administration of manufacturers' quotas. The amendment provides that during the 3-month period ending June 30, 1943, and during each subsequent 3-month period, no firm or individual may use in manufacturing other products more than 600 pounds or 120 percent of the quantity of honey so used during the corresponding 3-month period of 1941, whichever is the greater.

CEILING PRICES FOR PACKAGED HONEY.---On March 29, 1943, the Acting Administrator, Office of Price Administration, with the approval of the Acting Secretary of Agriculture issued amendment 4 of Maximum Price Regulation 275 dealing with extracted honey. This amended maximum price regulation dealing with extracted honey shall not be applicable to sales at wholesale and sales at retail except (a) that resales of "bulk honey" shall be covered by this regulation, (b) all sales of "packaged honey" by the packager thereof shall be governed by the regulation, and (c) sales at retail of "bulk honey" by the producer shall be governed by the regulation. The regulation includes a table giving ceiling prices of "packaged honey" f.o.b. packing plant in container sizes from 2 ounces to 12 pounds per case of 24, 12, and 6, whichever is applicable. Prices are established for sales made direct to wholesalers, for sales direct to retailers, and for sales direct to the domestic user. The prices for sales direct to the domestic users vary from 8 cents for a 2-ounce container to \$2.54 for a 12-ounce container.

CASEIN PLACED UNDER REGULATION.--On April 14, 1943, the Recording Secretary, War Production Board, issued General Preference Order M-307 placing casein under restriction. This defines casein and indicates permitted uses which include its use as adhesives. It provides procedures for securing supplies on the basis of amounts used for approved purposes in previous periods.

It is of interest to entomologists primarily because of the use of casein in insecticides. With the shortage of this material it would be appropriate to recommend the use of other types of spreaders and adhesives.

QUININE SULFATE FOR USE OF ARMED FORCES.--On March 20, 1943, the President issued Executive Order 9317 authorizing and directing the Procurement Division of the Treasury Department to make available from stocks on hand quantities of quinine sulfate for use of the Army and Navy. This is of interest to entomologists because of the extensive use of quinine in control of malaria.

RESTRICTIONS ON CASTOR OIL.--On March 19, 1943, the Acting Secretary of Agriculture issued Food Distribution Order 32 placing restrictions on the use and distribution of castor oil, the order to be effective on March 24, 1943. The order provides that no person shall deliver or accept delivery for use or process castor oil except as authorized or directed by the Director of Food Distribution Administration of the Department of Agriculture or a person designated to act for the Director. Exceptions are made which permit deliveries or use of in any one month quantities of 40 pounds or less. Exceptions are also made for the use of small quantities for medicinal purposes.

Castor oil is used in the manufacture of certain insecticides and is of particular interest because of its use in making one of the materials used as an activator in aerosols and louse powders.

ORDER ON SHELLAC AMENDED.--On April 8, 1943, the Recording Secretary, War Production Board, amended Allocation Order M-106, governing shellac. The amended order includes new definitions of shellac and amends previous requirements on stock exemptions and certain other requirements of the previous order.

The restrictions provided in this order do not have any particular effect on the work of entomologists. Their interest in it is, to a large extent, the fact that the product is produced by secretions of the lac insect, (*Laccifera*) *Tachardia lacca* Kerr.

CLOSURES FOR GLASS CONTAINERS OF HONEY.--On March 15, 1943, the Director General for Operations, War Production Board, amended Conservation Order M-104 dealing with closures for glass containers. The amended order specifies the quantities of closures that may be made available for the packing of various kinds of foods, drugs, and chemicals, giving the percentage amount of such closures in relation to

the amount used in the packing quotas for the years 1941 and 1942. The amount of material used for manufacture of glass closures for honey as food is very limited. The material to be used for such closures is blackplate. Where honey is packed in glass for health or medicinal purposes only the percentage of closures that may be manufactured for 1943 is 100 percent of the packing quota for 1942. Here also the closure material is to be blackplate.

FARM VETERINARIANS NOW ELIGIBLE TO GET NEW TIRES.--Farm veterinarians may now get new tires as replacements even when the casings on their cars are recappable, Office of Price Administration has announced. This privilege is accorded, under the regulations, to persons whose occupations sometimes necessitate emergency travel at such high speeds that recapped tires might be unsafe. Such operators are also eligible for two mud and snow tires, in addition to their ordinary tires.

PRIORITY SYSTEMS REGULATIONS AMENDED.--On April 7, 1943, the Recording Secretary, War Production Board, amended Priority Regulations No. 13 to provide uniform rules governing special sales of idle or excess industrial materials. This regulation establishes procedures for handling sales for a goodly number of kinds of materials, including some used for insecticides, such as cryolite, arsenicals, cube, pyrethrum, rotenone, diphenylamine, ethylene dichloride, and naphthalene. The order provides, however, that the regulations governing special sales shall be subject to the provisions of all special orders applicable to particular materials. It does not introduce any new features in the case of insecticidal materials and other items of interest to those concerned with insect pest control.

MOVEMENT OF BANANAS IN CARLOADS PROHIBITED.--On April 13, 1943, the Secretary of the Interstate Commerce Commission issued service order 117, effective April 23, 1943, ordering railroads not to accept for movement through the United States bananas originating in foreign countries and destined to points in another foreign country. The order permits exceptions, by the Director of the Bureau of Service, Interstate Commerce Commission, in hardship cases.

The order is of interest to plant quarantine officials at ports of entry.

CONTROL OF IMPORTATION OF BURLAP AND BURLAP PRODUCTS.--On March 29, 1943, the Recording Secretary, War Production Board, amended Conservation Order M-47, dealing with the importation of burlap and burlap products. The order provides that no person shall import burlap who did not import it in 1940, except agencies of the Government. It places restrictions on delivery, includes definitions for burlap, indicates the ports where imports may be made, and provides that each importer or importing bag manufacturer shall set aside two-thirds of each cargo of burlap imported by him and shall not dispose of it except as expressly directed by the War Production Board. It provides for setting up of quotas and establishing inventories on the basis of certificates of imports. It includes provisions for handling damaged burlap.

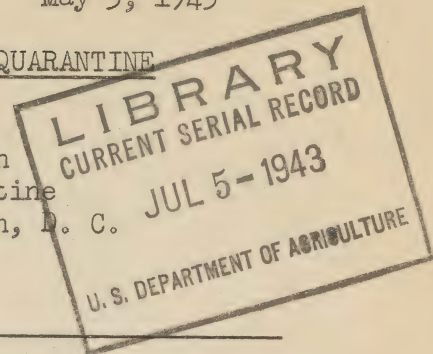
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Exp 1

May 3, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

CONTROL OF THE AGRICULTURAL USES OF PYRETHRUM TRANSFERRED TO THE FOOD PRODUCTION ADMINISTRATION.--On April 24, 1943, the Executive Vice Chairman, War Production Board, issued Directive 15, delegating authority in reference to pyrethrum insecticides. The directive transfers to the Administrator of Food Production and Distribution power to control the use of pyrethrum insecticides in agriculture within the quantities of such insecticides that from time to time are allocated to agriculture by the War Production Board. Under this directive the Administrator of Food Production and Distribution has power to regulate or prohibit the use of pyrethrum insecticides in agriculture, and the sale or disposition of pyrethrum insecticides to the ultimate consumer for use in agriculture. The Administrator of Food Production and Distribution may issue such regulations, orders, and directives, and direct such inspections, and take such measures as he may deem necessary or appropriate for the effectuation of the powers conferred.

The directive specifies that the Administrator of Food Production and Distribution is not authorized to determine the amount of governmental requirements for pyrethrum and pyrethrum insecticides, to regulate or prohibit the use or sale of pyrethrum for non-agricultural uses, to regulate or prohibit the manufacture or import of pyrethrum or pyrethrum insecticides, to control the delivery of pyrethrum insecticides for the account, acquisition or use of military and other agencies of the Government.

The directive authorizes the Administrator of Food Production and Distribution to exercise power, authority, and discretion conferred by the directive through such officials as he may determine. It also provides that the War Production Board may from time to time delegate to the Administrator of Food Production and Distribution such additional powers with respect to the distribution or use in agriculture of pyrethrum insecticides as he may determine to be necessary.

For the purpose of the directive "Pyrethrum" means pyrethrum flowers and the powder, dust, or extract derived therefrom. "Pyrethrum insecticides" mean any combination containing pyrethrum combined with

other liquid or dry materials, whether active or inert, provided that such compound is suitable for use as an insecticide.

"Agriculture" is defined to mean the raising of crops and domestic animals and includes the production of dairy products, cotton, tobacco, wool, hemp, flax fiber, and all trees, shrubs, flowers, grass, and other plants. The term does not include the distribution, through retail stores or otherwise, of agricultural products.

AGRICULTURAL USES OF PYRETHRUM INSECTICIDES.---On April 30, 1943, the War Food Administrator issued, effective May 1, 1943, Food Production Order No. 11 prescribing the agricultural uses of pyrethrum insecticides. This order is issued pursuant to executive orders to assure adequate production of food to meet war and civilian needs and follows the transfer of the control of the agricultural uses of pyrethrum insecticides to the Food Production Administration by War Production Board Directive 15 issued April 24, 1943. The Food Production Order governs the agricultural uses of pyrethrum insecticides but does not affect other civilian or military uses. Control in reference to these remains in War Production Board to be governed by order M-179 or amendments thereof.

The Food Production order defines "pyrethrum insecticide" as meaning any compound derived from pyrethrum flowers containing pyrethrins combined with other liquid or dry materials, either active or inert, provided that such compound is suitable for use as an agricultural insecticide.

The order is to be administered by the Director of Food Production Administration and correspondence relating to it should be addressed to Food Production Administration, U. S. Department of Agriculture, Washington, D. C., reference: Food Production Order No. 11, Pyrethrum Insecticide.

Permitted agricultural uses.---The order provides that, except for small packages hereinafter referred to, or unless specifically authorized or directed by the Director of Food Production Administration, no person shall deliver any pyrethrum insecticide to any other person for use for agricultural purposes until a certificate has been signed by the purchaser, stating that the pyrethrum insecticide will be used solely for one or more of the permitted uses. The permitted agricultural uses are:

(i) Commercial crops:

- Cole crops, including cabbage - control of caterpillars;
- Sugar and other beet seed crops - control of leafhoppers and plant bugs;
- Seed and sweet corn - control of corn earworm;
- Beans - control of leafhoppers;
- Potatoes - control of leafhoppers;
- Grapes - control of leafhoppers on raisin grapes;
- Cranberries - control of worms and leafhoppers.

- (ii) Vegetable gardens:
Vegetables grown in home, farm, community, and victory gardens for the control of pests.
- (iii) Others:
Use in the protection of cattle and in dairy barns, dairies, creameries, cheese factories and related establishments handling dairy products.

The order requires that no person shall accept delivery of any pyrethrum insecticide which he knows or has reason to believe is delivered in violation of the requirements; or to use any pyrethrum insecticide so delivered for agricultural use for purposes other than certified in the certificate.

Form of certificate required.--The order provides that, except for small quantities hereinafter mentioned, no person shall deliver pyrethrum insecticide to any other person unless he has received from such person a certificate worded substantially in the following form.

The undersigned purchaser hereby certified to the Food Production Administration and to his dealer, pursuant to Food Production Order No. 11, that the _____ lbs. or gals. of pyrethrum insecticide described below hereby ordered for delivery in _____, 194____, will be used for the following (month) _____ purposes only _____

Description of insecticide _____

Name of Purchaser

Date

Duly Authorized Official Title

Small package exemption from certificate.--The order provides that no certificate of use is required where the agricultural use of the pyrethrum insecticide purchased by any person is not more than three pounds if in solid form or not more than one quart if in liquid form.

Other requirements.--The order provides that persons engaged in the production and sale of pyrethrum insecticides shall keep

for a period of not less than two years detailed records of their production and deliveries of pyrethrum insecticides, including the quantity and kinds produced and delivered and the persons to whom deliveries are made. It further provides that all persons engaged in selling pyrethrum insecticides shall keep the certificates required for a period of not less than two years. It provides that reports concerning the production and deliveries of pyrethrum insecticides will be made to the Director of Food Production Administration as required. It provides that duly authorized representatives of the Director of Food Production Administration may have access for purposes of audit and inspection to records and accounts.

It provides that persons engaged in the production and sale of pyrethrum insecticide shall notify their regular customers as soon as possible of the requirements of the order. Failure to receive notice shall not, however, excuse persons from complying with the terms of the order. The order includes customary provisions in regard to punishment for violations.

The order provides that where the application of the order would work an exceptional and unusual hardship on any person he may apply to the Director of the Food Production Administration for relief. Such appeal must be in writing and pertinent facts and information must be submitted. The decision of the Director shall be in writing and be final and conclusive.

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May 4, 1943

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WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

LIBRARY
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JUL 5 - 1943

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C. U.S. DEPARTMENT OF AGRICULTURE

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

ROTENONE PRICE REGULATION AMENDED.--On April 27, 1943, the Administrator, Office of Price Administration, amended Maximum Price Regulation 298, dealing with rotenone, by adding a section, the amendment to become effective May 3, 1943. The additional section deals with the price of rotenone dusts prepared from rotenone resins. The additional section reads as follows:

"(b) The maximum price of a dust base containing finely ground rotenone resin and clay, talc, nutshell flour or similar diluent, f.o.b. manufacturer's plant, shall be the sum of the following: (i) the fractional quantity of pure rotenone contained in one pound of dust base multiplied by \$13.00, (ii) the delivered cost to the manufacturer of the quantity of diluent contained in one pound of the dust base, and (iii) \$.03 per pound of the dust base."

ORDER ON WOODEN FRUIT AND VEGETABLE CONTAINERS AMENDED.--On April 23, 1943, the Recording Secretary, War Production Board, amended Limitation Order L-232, dealing with wooden shipping containers for fresh fruits and vegetables. The amended order redefines the term "Wooden Shipping Container"; provides that manufacturers and dealers shall not dye, stain, or otherwise color wooden shipping containers; provides that other than the markings required by law the manufacturers and dealers shall not imprint or stamp names, words, or figures on the wooden shipping containers, but this does not apply to paper or other labels which may be affixed. The order has appended a revised table of specifications which includes 6 types of hampers, baskets, and berry cups, and 68 types of other wooden shipping containers for fresh fruits and vegetables, including apples, oranges, melons, celery, and miscellaneous vegetables.

ORDER ON CANS AMENDED.--On April 27, 1943, the Recording Secretary, War Production Board, amended Conservation Order M-81, dealing with cans. The amendment relates to open-top sanitary tinplate cans and makes provision for cans packed in accordance with Food Distribution orders. The amended order also includes the schedules as to packing

quotas. For products such as honey these remain unchanged, the packing quota for honey being unlimited in 60-pound reusable cans, with 1.25 tin body and 1.25 tin ends.

CONSERVATION ORDER ON TALC AMENDED.--On April 29, 1943, the Recording Secretary, War Production Board, amended Conservation Order M-239, dealing with talc. The amended order defines "talc" to mean naturally occurring magnesium silicate, both crude and beneficiated. The term "steatite talc" is defined to mean naturally occurring magnesium silicate, both crude and beneficiated, suitable for use in the manufacture of electrical insulators and containing not to exceed 1½% lime, not to exceed 1½% ferric oxide, and not to exceed 4% alumina. The order includes two lists of uses of steatite talc. These lists are established for inventory purposes. List B includes the use for insecticides. Under the terms of the order no person shall, after April 29, 1943, sell or deliver talc to any person in excess of inventory requirements of the order. The inventory requirements of talc for use for insecticides shall not exceed two months' supply.

MOVEMENT OF POTATOES FROM MAINE CONTROLLED.--On April 26, 1943, and effective that date the Secretary, Interstate Commerce Commission, issued Service Order 119, prohibiting the movement of potatoes from Maine by common carriers under the control of the Commission except when permit for such movement has been issued by the Director of Food Distribution Administration, in accordance with Food Distribution Order No. 49, and amendments.

TRANSPORTATION OF COMMODITIES BY TANK CARS CONTROLLED.--On April 30, 1943, the Recording Secretary, War Production Board, amended General Transportation Order T-1, controlling shipments. The amended order divides materials that are normally moved by tank cars or tank trucks into three lists. It provides that no person shall originate a shipment by tank cars of any materials other than those specified in the three lists, unless they are consigned to designated military agencies in the United States or Canada or there is specific authorization for such movement from the War Production Board.

The materials that are used for insecticidal purposes are included in List 3. The order does not restrict shipments of materials in List 3, except to the extent that such shipments are controlled by restrictions under List 1 and List 2, and these are not applicable to materials that are used for insecticides. Among the materials included on List 3 are: Arsenic (arsenious acid); carbon tetrachloride; creosote oil; crude naphthalene; diphenylamine; ethylene dichloride; furfural; orthodichlorobenzol; pyridine; and zinc chloride.

BURLAP ORDER AMENDED.--On April 30, 1943 the Recording Secretary, War Production Board, amended Conservation Order M-47, which deals with burlap and burlap products. This order establishes quotas for the imports of burlap, provides that each person other than authorized Governmental agencies importing burlap shall set aside two-thirds of his part of each cargo arriving in the United States to be held as a

stockpile. It provides, however, that that part which may be damaged will be excluded from the imports, as far as requirements of stockpiling are concerned.

MOLASSES FOR FOOD TRANSFERRED TO WAR FOOD ADMINISTRATION.--The control of deliveries and use of edible molasses has been transferred to the War Food Administration by order from the War Production Board. On April 27, 1943 the War Food Administration issued Food Distribution Order No. 51, establishing restrictions on the deliveries and use of edible molasses.

ORDER ON IMPORTS OF STRATEGIC MATERIALS AMENDED.--On April 28, 1943, the Recording Secretary, War Production Board, amended General Imports Order M-63, governing the imports of strategic materials. The amended order does not modify the situation as it relates to the importation of materials which are of interest to entomologists and plant quarantine officials. The important items, such as pyrethrum, rotenone, sesame oil, silk, retain the same position on the list of strategic materials as they have in the preceding order.

CORRECTION OF ITEM ON CLOSURES FOR GLASS HONEY CONTAINERS.---The item dealing with Conservation Order M-104 beginning on page 3 of the War Letter of April 21, 1943, contains an important typographical error. The word "very" in the third line on page 4 should be deleted and the word "limited" should be changed to "unlimited."

Reserve

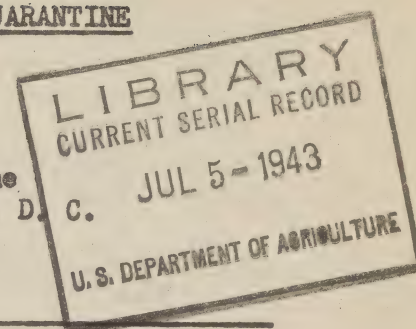
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June 2, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

~~CONFIDENTIAL~~

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



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CONTROL OF AGRICULTURAL USES OF ROTENONE TRANSFERRED TO FOOD PRODUCTION ADMINISTRATION.—On May 8, 1943, the Chairman, War Production Board, amended Directive 15, which had been issued on April 24, 1943, to include rotenone. This directive delegates authority in reference to the agricultural uses of rotenone insecticides to the War Food Administrator. It contains for rotenone, and reestablishes for pyrethrum, the same provisions as the original Directive 15. (See summary in War Letter issued May 3, 1943.) For the purpose of this directive "Rotenone means the active insecticidal ingredients of the roots of derris, cube, barbasco, tuba, or timbo. The term includes both crude root in the form of root or of root which has been dried, broken, shredded, cut or chipped, and processed rotenone in the form of finely ground or powdered crude rotenone, or in the form of liquid or solid extracts (or resins) obtained from rotenone."

ORDER GOVERNING IMPORT PRICE OF ROTENONE AMENDED.—On May 15, 1943, the Administrator, Office of Price Administration, issued Amendment 2 to Maximum Price Regulation 298, governing rotenone. The amended order establishes a new maximum price for rotenone root that is imported. It does not change the maximum price of rotenone powder containing 5% pure rotenone, which was established by the original order at 35¢ per pound. The amended order, which became effective May 21, 1943, fixes the maximum prices for 5% crude rotenone root at 22¢ per pound. This is 9/10 of one cent above the prices recently resulting from the formula set forth in the original regulation. The amendment reduces the increased cost that the processor was required to absorb under the original order. It eliminates the processor's hazard of fluctuations in root prices. The Office of Price Administration indicates that rotenone root from Peru averaged about 5½% crude rotenone, and that the roots imported varied from 3% to 8%. As defined

in the order, crude rotenone means: "The rotenone which would be indicated as present in the rotenone-bearing material by the Seil analytical method, in which the rotenone content is calculated from the weight of the crude solvent."

This amendment is primarily of interest to the processors of rotenone insecticides and to those responsible for allocation of supplies that are imported.

FARM MACHINERY RATIONING ORDER REVISED.—On May 6, 1943, the War Food Administrator amended Food Production Order 3, dealing with new farm machinery and equipment. This revised order, dealing with farm machinery rationing, brings together in one document the amendments, announcements, supplementary orders, and interpretations which have been issued on the progress of the rationing program since its establishment on November 28, 1942. The revised order enables USDA State War Boards, at their discretion, to cancel county quotas on quota machinery, to avoid delay in putting into use farm equipment which arrives late. If a State exercises this authority, the tag requirements to the county level are abolished and machinery is only tagged to specify the State in which it is to be sold. Farmers would then be required to locate the machinery they wish to purchase before the War Board issues a purchase certificate. Similarly, in order to facilitate the movement of machinery, County Farm Rationing Committees are given authority to limit the time of purchases. The order also increases the percentages of specified farm equipment which manufacturers may distribute without restriction, except for rationing at the consumer level. New provisions deal with fencing, drawn wire, pipe, bale ties, mill-fabricated water well casing, and farm scales.

In revising Food Production Order 3, the War Food Administration divided farm machinery into two general groups. One group lists the machinery and the percentages of their production which manufacturers may distribute without restriction. This farm equipment is not subject to distribution "quotas" and the principal control is rationing at the farmer level. The second group governs rationed types of farm equipment and machinery distributed by "quotas," which specify the number of machines to be sold in any State or county, and by "tags," which earmark the machinery for States and counties in terms of these quotas. Included in this group are: Power sprayers; traction sprayers; power dusters; and traction dusters. Quotas and tags are used because most farm machinery produced this year is being made by smaller manufacturers, most of whom have previously distributed only in local areas, War Food Administration officials said. Without directed distribution, most 1943 farm machinery would be sold in the areas formerly served by the smaller manufacturers, leaving little or no machinery for the sections of the country normally served by the larger manufacturers who are no longer producing their usual volume of farm machinery.

The amended order puts in one document the procedure concerning the rationing of farm machinery. Copies of the amended order, which supersedes FPO 1 and 2, may be secured from the Food Production Administration, and perhaps also from the USDA State War Board Chairmen.

PREFERENCE RATING FOR OFFICERS' UNIFORMS AMENDED.---On May 15, 1943, the Recording Secretary, War Production Board, amended Preference Rating Order P-131, dealing with officers' uniforms. The amended order broadens the definition of the words "Officers' Uniforms" so as to make them applicable to the uniforms worn by inspectors of the Bureau of Entomology and Plant Quarantine. The amended definition includes, under officers' uniforms, materials needed to manufacture uniforms in accordance with the specifications prescribed by the applicable U. S. Army, Navy, or other Departmental or agency regulations, governing at the time of the application of the preference rating. "Officers' uniform materials" mean only those materials, except brass buckles for web belts and except metal insignia, prescribed by regulations governing at the time of the application of the preference rating.

The rating assigned to these materials is A-1-1. The regulation requires that upon sale or delivery the person selling or delivering the uniform shall maintain a record. The record shall include the name, rank, service, and serial number, if any, of the officer to whom the uniform is sold.

HAND FORCE OILERS FOR CORN EARWORM CONTROL.---In the latter part of March, War Production Board allocated to a manufacturer the necessary metal needed to produce 2,000 hand force oilers of the type used to control corn earworm in market and seed sweet corn. It is understood that oilers of this type would be distributed by D. B. Smith & Company, Inc., Smith Building, Main Street, Utica, N. Y. Within the limit of supplies the oilers can be made available from this source. Those concerned with recommending measures for the control of the corn earworm in market and seed sweet corn may wish to acquaint farmers as to this source, where oilers may be obtained.

The use of pyrethrum for corn earworm control on market and seed sweet corn is one of the permitted uses enumerated in Food Production Order 11, dealing with pyrethrum.

RESTRICTIONS ON FIBRE DRUMS.---On May 21, 1943, the Recording Secretary, War Production Board, issued Conservation Order M-313 dealing with fibre drums. As defined in the order fibre drum means any cylindrical shipping container of the types known in the container industry as "fibre drums" and "fibre pails", made with a body of paperboard and ends of paperboard, steel, wood, or any combination thereof, in capacities of one gallon or more, and is of the types which, upon

conforming with the Consolidated Freight Classification rule and the Interstate Commerce Commission regulation, are acceptable for shipment without covering containers. The order provides that on and after June 16, 1943, no manufacturer shall ship fibre drums to any purchaser except as specifically authorized by the War Production Board on Form PD-881. The order establishes reporting requirements, inventory provisions, and places restrictions on purchases.

PREFERENCE RATINGS FOR WOODEN AND FIBRE SHIPPING CONTAINERS.---On May 28, 1943, the Recording Secretary, War Production Board, amended Preference Rating Order P-140 establishing preference ratings for wooden and fibre shipping containers. Preference ratings of 5 categories are assigned to a large number of uses. The assigned ratings in order of greatest preference are: AA-1, AA-2X, AA-3, AA-4, and AA-5. The highest rating, AA-1, is assigned containers used for specified materials, food, drugs, medical supplies, etc., for the armed forces. The next highest rating, AA-2X, is assigned containers used for materials for various governmental agencies directly associated with war materials, food, and supplies. The AA-3 rating includes: Agricultural implements, many chemicals, drugs, honey in 10-gallon containers, certain fresh fruits and vegetables, and professional and scientific supplies. The fourth list, AA-4, includes insecticides such as calcium arsenate, lead arsenate, paradichlorobenzene, various kinds of fresh fruits and vegetables, and certain fungicides such as copper sulphate. Containers assigned the AA-5 rating include such uses as clothing, cooking, and heating appliances, paint, tobacco, and fresh fruits and vegetables not specifically listed. The fresh fruits and vegetables included under the AA-3 rating are: Apples, apricots, bananas, cherries, citrus, grapes, nectarines, peaches, plums, pears, fresh prunes, berries, beans (snap and lima), carrots, peas (fresh green), and tomatoes.

BUTYL ALCOHOL ORDER AMENDED.---On May 26, 1943, the Recording Secretary, War Production Board, amended General Preference Order M-159 dealing with butyl alcohol. The order redefines butyl alcohol to mean "normal, secondary, and tertiary butyl alcohol, isobutyl alcohol, and their acetic esters." Otherwise, the amendment refers to procedures of filing PD forms 600 and 601. Among the uses for which the products regulated may be supplied is the manufacture of insect repellents.

ORDER ON SULFAMIC ACID AMENDED.---On May 7, 1943, the Recording Secretary, War Production Board, amended General Preference Order M-242, dealing with sulfamic acid and sulfamic acid derivatives. Sulfamic acid derivatives are defined to mean ammonium sulfamate, fire retardants, and weed-killer made from sulfamic acid. The order requires

certification of customer's use, places restrictions on delivery, requires approval from War Production Board for uses, and includes the usual standard provisions. Among the uses listed and approved is weed-killer. For this purpose the applicant need not list the name of any customer to whom not more than 2,500 pounds are to be delivered in any month for such use.

CHLORINATED HYDROCARBON SOLVENTS ORDER AMENDED.—On May 20, 1943, the Recording Secretary, War Production Board, amended General Preference Order M-41 dealing with chlorinated hydrocarbon solvents. The amended order modifies restrictions on the delivery of chlorinated hydrocarbon solvents for uses where assigned preference rating B-2. It provides, however, that persons requiring carbon tetrachloride for uses in degreasing machines, packaged spotting and cleaning preparations, etc., which have been assigned a preference rating of B-2, may receive deliveries in any month of an amount of carbon tetrachloride up to but not in excess of 150 percent of such person's average monthly consumption during the base period. In effect the order liberalizes the delivery of amounts of carbon tetrachloride for these purposes.

No change is made in the preference rating on requirements for the insecticidal uses of chlorinated hydrocarbon solvents, including ethylene dichloride, which still has a preference rating of A-10.

ISOPROPYL ALCOHOL ORDER AMENDED.—On May 18, 1943, the Recording Secretary, War Production Board, amended General Preference Order M-168 dealing with isopropyl alcohol. The order requires certification of the customer's use, provides that the uses shall be approved by the War Production Board, requires reports, and includes the various standard provisions. Among the uses which are authorized is the use in the manufacture of oil emulsions, in which entomologists are interested.

REVISED MATERIAL SUBSTITUTIONS AND SUPPLY LIST ISSUED.—On April 15, 1943, the Conservation Division, War Production Board, issued a revised Material Substitutions and Supply List (No. 8). This list is compiled to reflect the relative current supply of materials useful to the war program and to promote the conservation of the more critical materials through substitution of less critical and non-critical materials. The list divides materials into three main groups. Group I includes materials which are insufficient, either for war demands alone, or for war plus essential civilian demands. Group II includes materials essential to the war program, the supplies of which are sufficient to meet war demands plus essential civilian demands. Group III includes materials which are available as substitutes for scarcer materials, unless the supplies are restricted by labor, manufacturing, or transportation difficulties.

The new list includes under each of the main groups a sub-heading dealing with insecticides and fungicides. This sub-heading was added to the supply list as a sub-group in recognition of the importance of these supplies. It does not broaden the scope of the list so that it covers a broader field as the materials used in the manufacture have been included in earlier lists. The materials needed in the manufacture of some of the insecticides and fungicides are in certain instances given in a group other than the group in which the insecticide or fungicide occurs. The position of the insecticides and fungicides in the various groups of the list depends not only on the availability of the insecticide and fungicide, but also on the general availability of the materials needed for their manufacture. For example, from the standpoint of availability of supplies of insecticides, it is understood that cryolite used for insecticides is sufficiently abundant to be available for a substitute. Because of the other uses for cryolite, it is, however, listed in Group II.

The insecticides and fungicides that are included are as follows:

- Group I (Insufficient)--Arsenic and Derivatives; Copper Chemicals; Dichlorethyl Ether; Ethylene Dichloride; Oils (Castor); Pyrethrum; Rotenone.
- Group II (Sufficient)--Cryolite; Diphenylamine; Oils (Sesame Seed).
- Group III (Substitutes)--Methyl Bromide; Nicotine Sulfate.

The revised list also includes a supplementary list of materials on which the inventory restrictions have been eased by lifting the curtailments under Priorities Regulation No. 1. Among the materials on the supplementary list are Pyrophyllite and Sulphur.

REGULATIONS ON PRIORITIES SYSTEM AMENDED.--On May 15, 1943, the Recording Secretary, War Production Board, amended Priorities Regulation 1, to be effective on the same date. The amended priorities regulation describes in detail procedures to be followed. The sequence of priority ratings is of interest and is quoted below:

"944.5 Sequence of preference ratings.

- "(a) Preference ratings in order of precedence are: AAA, AA-1, AA-2, AA-2X, AA-3, AA-4, etc.; A-1-a, A-1-b, etc.; A-2, A-3, etc.; B-1, B-2, etc. The letter 'X' after a numeral indicates that such rating is inferior to the rating of the same numeral and superior to the rating of the next lower numeral. (For example, AA-2X is inferior to AA-2 and superior to AA-3.)
- "(b) All orders rated AA-2 before May 15, 1943, shall continue to be equivalent to orders rated AA-1 in accordance with this regulation as in effect prior to that date. A person to whom a rating of AA-2 has been applied or extended before then may thereafter extend the same as

provided in Priorities Regulation 3, and, in doing so, may certify that the order is rated AA-1. However, with respect to all orders rated on or after May 15, 1943, a rating of AA-2 shall be inferior to AA-1 and superior to AA-2X."

ORDER ON IMPORTS OF STRATEGIC MATERIALS AMENDED.—On May 14, 1943, the Recording Secretary, War Production Board, amended General Imports Order M-63, dealing with imports of strategic materials. The amended order includes lists of materials that are governed by the order. Such lists include a number of items of interest to entomologists and plant pest control officials, such as lac, pyrethrum, rotenone, castor oil, etc. The relative position as to the importance of these materials is not changed in the amended order. The more important of these are still maintained in the most restricted class.

PROCEDURE FOR DETERMINING PRICE OF INSECT SCREEN CLOTH REVISED.—On May 28, 1943, the Acting Administrator, Office of Price Administration, issued amendment 2 to Revised Price Schedule 40, dealing with Builders' Hardware and Insect Screen Cloth. The amendment provides that the maximum price of insect screen cloth offered for sale by a jobber subsequent to June 3, 1943, shall not be more than the actual cost, plus a mark-up over cost of 33-1/3%, plus transportation charges paid by the jobber in obtaining delivery.

(It will be recalled that copper is not available for manufacture of insect screen.)

PATENTS ON PRODUCTION OF METALDEHYDE VESTED IN ALIEN PROPERTY CUSTODIAN.—On April 20, 1943 (published May 27, 1943) the Alien Property Custodian issued Vesting Order 1250, which vests all right, title, and interest, etc., in three patents on the production of metaldehyde, controlled by Lonza Elektrizitatswerke und Chemische Fabriken, A. G., of Switzerland (which is the same as Elektrizitatswerk Lonza), in the Alien Property Custodian. Under this order the Alien Property Custodian may use, administer, liquidate, sell, or otherwise deal with these patents in the interest and for the benefit of the United States. The patents so vested are: 1,612,032, issued December 28, 1926 to Theodor Lichtenhahn; 1,693,204, issued November 27, 1928 to Emil Luscher; and 1,804,357, issued May 5, 1931 to Emil Luscher and Heinrich Steiger.

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U.S. DEPARTMENT OF AGRICULTURE July 1, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

PRICES SET FOR BULK HONEY.--On June 17, 1943 the Administrator, Office of Price Administration, issued Amendment 5 to Maximum Price Regulation 275 dealing with extracted honey. The amendment establishes specific cents-per-pound maximum prices for domestic and imported bulk honey at levels which represent a slight reduction under going prices.

The maximum prices established by the amendment for dealer sales of unprocessed domestic bulk honey are 12½ cents a pound for sales of 20,000 pounds or more; 13½ cents a pound for sales of from 1,500 to 19,999 pounds; 14½ cents for sales of less than 1500 pounds. Maximum prices for processed domestic bulk honey are one cent higher in each bracket.

These prices are f.o.b. shipping point and do not include the container in which the honey is shipped. Where the shipper supplies the container, he can add one-half cent a pound. The amendment also permits addition of the actual freight charge.

MOLASSES ORDER AMENDED.--On June 7, 1943 the Recording Secretary, War Production Board, amended General Preference Order M-54 dealing with molasses. The amended order redefines molasses to mean "any molasses, sirup, sugar solution, or any form of fermentative sugar (derived from sugar cane or sugar beets) and hydrol (corn sugar molasses). The term does not, however, include sugar as defined in Rationing Order No. 3 or sugar intended for and used for manufacture into sugar as so defined, or edible molasses as defined in Food Distribution Order No. 51. Blackstrap molasses is any final molasses produced in the manufacture of sugar from sugar cane or from the

refining of raw sugar and includes all beet molasses produced in the manufacture of sugar from sugar beets. Invert molasses is any molasses made from sugar cane without extraction of sugars. For the purpose of this order one gallon of invert molasses is to be construed as one and a half gallons of blackstrap molasses and one gallon of hydrol is to be construed as one gallon of blackstrap molasses."

The priority regulation applicable to Class 2 and Class 3 purchasers is also amended. The provisions of the order as to Class 7 purchasers, which includes those using molasses to control insects, and the insecticidal uses of molasses are not changed in the amended order.

ORDER GOVERNING CHLORATE CHEMICALS AMENDED.--On June 7, 1943 the Recording Secretary, War Production Board, amended General Preference Order M-171 dealing with chlorate chemicals. Chlorate chemicals is defined to mean "potassium chlorate, sodium chlorate, barium chlorate, potassium perchlorate, ammonium perchlorate, perchloric acid and any other chlorate or perchlorate chemical." Restrictions on deliveries require approval by the War Production Board and provide they shall be made on a calendar quarter basis on applications filed on Form PD-602. Certification is required of customer's use in a prescribed form for delivery in excess of 25 pounds. Among the recognized uses are as weed killers either in the manufacture of or use as. With certain restrictions a certificate as to use for a weed killer is not required from the ultimate consumer.

PRICE OF COPPER SULPHATE.--On June 8, 1943 the Acting Administrator, Office of Price Administration, issued Amendment 3 of Maximum Price Regulation 354 dealing with copper sulphate. The Amendment provides that no person, other than an agricultural consumer, shall buy or receive any copper sulphate at prices higher than the maximum price established by the maximum price regulation governing the sale of copper sulphate.

NEW LIMITATION ORDER ON FARM MACHINERY.--On June 15, 1943 the Recording Secretary, War Production Board, issued Limitation Order L-257 dealing with Farm Machinery and Equipment and Attachments and Repair Parts. The new order is to be effective July 1, 1943 and supersedes Limitation Order L-170, except as to Supplementary Limitation Order L-170-a which continues in effect. The new order redefines producers, changing the grouping and classes used in the old order. It continues the special requirements on Beehives and establishes quotas for a wide variety of items. The quotas for manufacture of sprayers and dusters are quoted below. Producers are not restricted by quota percentage in the manufacture of repair parts. Quotas for new machinery and equipment are expressed as

percentage of net shipping weight of each item produced in 1940 or 1941, whichever is higher. Small producers may use the quota percentage of 100 percent for any item or items as long as the aggregate production does not exceed 100 percent.

The following are the quotas covering the manufacture for domestic farm use for the period July 1, 1943 to June 30, 1944:

Group 5: Sprayers, Dusters

Division 1: Power Sprayers

Item No.	Quota Percent
108 Market garden type, under six g. p. m.	63
108a Orchard type, six to ten g. p. m. auxiliary engines	63
108b Orchard type, six to ten g. p. m. power take-off	63
108c Orchard type, eleven to twenty g. p. m. auxiliary engines	63
108d Orchard type, eleven to twenty g. p. m. power take-off ..	63
108e Orchard type, over twenty g. p. m. auxiliary engines	63
108f Orchard type, over twenty g. p. m. power take-off	63
108g Field or row crop type, six to ten g. p. m. auxiliary engines	63
108h Field or row crop type, six to ten, g. p. m. power take-off	63
108i Field or row crop type, eleven to twenty g. p. m. auxiliary engines	63
108j Field or row crop type, eleven to twenty g. p. m. power take-off	63
108k Field or row crop type, over twenty g. p. m. auxiliary engines	63
108l Field or row crop type, over twenty, g. p. m. power take-off	63
108m Field or row crop type, tractor mounted	100
108n Propeller blast type	100
109 Traction sprayers, under six g. p. m.	100
109a Traction sprayers, six g. p. m. and over	100

Division 2: Hand Sprayers with Tank, Barrel, Knapsack, etc. with Complete Equipment (Capacity 1 qt. or over but less than six gallons)

110 Compressed air	70
111 Knapsack, self-contained	68
112 Trombone pump type	61
113 Bucket, pump type, single cylinder	73
114 Bucket, pump type, double cylinder	70
115 Atomizing, single action (1 qt. and larger capacity)	62
116 Atomizing, continuous (1 qt. and larger capacity)	64

Division 3: Hand Pump Sprayers (Capacity Six Gallons or More)	
117	Barrel pump sprayer 87
118	Wheelbarrow sprayer 75
Division 4: Spray Pumps, Power	
119	Spray pumps, power 104
Division 5: Weed and Pear Burners	
120	Weed and pear burners. 50
Division 6: Dusters	
121	Power duster, auxiliary engines 128
121a	Power duster, power take-off 128
122	Traction dusters 79
123	Hand dusters, rotary type 74
123a	Hand dusters, plunger type 74
Group 19: Miscellaneous Farm Equipment	
Division 1: Beekeepers' Supplies	
294	Beekeepers' supplies (except bee hives) (lbs.) 100
295	Bee hives (not limited, except iron and steel -- see par. (f) (1) (lbs.)

Limitation order L-257-a issued the same date establishes procedures and quotas for Farm machinery, etc., for export.

GENERAL PREFERENCE ORDER ON CASTOR OIL REVOKED.--On June 15, 1943 the Recording Secretary, War Production Board, revoked General Preference Order M-235 dealing with Castor Oil. The subject matter of M-235 has been reissued with amendments as Food Distribution Order No. 32. Liabilities or penalties accruing or incurred under M-235 are not affected by its revocation.

CASEIN ORDER AMENDED.--On June 8, 1943 the Recording Secretary, War Production Board, amended General Preference Order M-307 dealing with casein. The amended order provides new provisions for filing applications and reports. One of the uses for which allocations will be made is the use of casein in the preparation of insecticides. This is continued from the previous issue of the order.

COPPER ORDER COVERING TERMITE SHIELDS AMENDED.--On June 24, 1943 the Recording Secretary, War Production Board, amended Supplementary Order M-9-c-4 dealing with the use of copper construction materials. The amended order redefines terms used in the order. "Termite shields"

are included among the items specified in the definitions of "Copper or copper base alloy building material." The amended order restricts the delivery to and use of, excepting to certain governmental agencies, copper for the various items listed, unless specific written approval is secured from the War Production Board. Applications should be submitted in a letter setting forth the specific reasons why the material should be used.

This is primarily a difference in procedure rather than a change in the availability of copper for termite shields.

SHEET STEEL CONTAINER ORDER REVOKED.--On June 22, 1943 the Recording Secretary, War Production Board, revoked General Preference Order M-45 dealing with sheet steel containers.

FRENCH INSECTICIDAL PATENT VESTED WITH ALIEN PROPERTY CUSTODIAN.--On June 3, 1943 the Alien Property Custodian issued Vesting Order 1601 providing that a number of patents of nationals of France be vested with the Alien Property Custodian to be held, administered, liquidated, sold or otherwise dealt with in the interest and benefit of the United States. One of these is number T-C 199(c) on "Insecticidal Compositions" invented by Jean Motte and Jean Lambert, and owned by Societe des Usines Chimiques Rhone-Poulenc.

PRIORITIES SYSTEM REGULATIONS AMENDED.--On June 10, 1943 the Recording Secretary, War Production Board, amended Priorities Regulation 13 as it applies to special sale of Industrial Materials. The amended order redefines permitted special sales, procedures to be followed in applying for them, and for replacement of materials sold. It includes an appended schedule which indicates the requirements and procedures to be followed for securing various items. Among those listed are: Copper, cryolite, carbon tetrachloride, chlorinated hydrocarbon solvents, dichlorethyl ether, diphenylamine, ethylene dichloride, pyrethrum, and rotenone.

ORDER ON USE OF LIGHT AIRCRAFT AMENDED.--On June 28, 1943 the Recording Secretary, War Production Board, amended General Limitation Order L-262 dealing with light aircraft. The amended order provides that no single-engined aircraft of 500 horse power or less, or any interest therein, may be sold, leased, traded, rented, or delivered, except pursuant to specific authorization of the War Production Board. The restrictions do not apply to Governmental agencies or to air carriers holding certificates of necessity from the Civil Aeronautics Board, and to transfers of aircraft currently operated in Alaska.

This Order has a bearing on private aircraft used in connection with agriculture.

AIRPORTS OF ENTRY REDESIGNATED.--On June 19, 1943 the Acting Secretary of the Treasury issued a statement redesignating airports at Sandusky, Ohio, Havre, Montana, and Watertown, New York, as airports for entry of civil aircraft and merchandise carried thereon arriving from places outside of the United States.

CAN CONTAINER ORDER AMENDED.--On June 7, 1943 the Recording Secretary, War Production Board, amended Conservation Order M-81 dealing with can containers. The amended order includes new provisions in reference to metal keys for opening cans, the coating of the plate, exceptions for cans for packing products not sold in the same form in which packed for promotion of sale, and with qualifications for cans for packing any product subject to quota restrictions. It provides restrictions on delivery, purchase and use, and prescribes the form of certificate to be filed. The appended schedules give the packing quota, can sizes, and materials.

On June 11, 1943 the Recording Secretary, War Production Board, further amended Conservation Order M-81 dealing with can containers. Included in Schedule III, which covers non-food cans, are those used for the following purposes:

- Bees feeder cans, friction top, for use in shipping bees -
Packing quota 100 percent of 1942; size 2, 2½ and 3;
body 0.50 tin, ends chemically treated blackplate.
- Carbon bisulphide - Packing quota 100 percent of 1942;
size 1 lb.; body and ends of Special Coated Manufacturers' Terneplate.
- Chlorpicrin - Packing quota 100 percent of 1942; size
1 lb.; body and ends of Special Coated Manufacturers' Terneplate.
- Creosote - Packing quota 100 percent of 1942; size
1 gal.; body Special Coated Manufacturers' Terneplate;
ends Blackplate.
- Cyanide - Packing quota 100 percent of 1942; size 1 lb.,
2½ lbs.; body Special Coated Manufacturers' Terneplate;
ends Blackplate.
- Nicotine sulphate - Packing quota unlimited; size 5 lbs.;
body and ends 1.50 tin.

CONTAINER ORDER M-113 REVOKED.--On June 22, 1943 the Recording Secretary, War Production Board, revoked General Inventory Order M-113 dealing with corrugated and solid fiber boxes, wire bound wood boxes and nailed wooden boxes for can manufacturers and canners.

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July 6, 1943

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WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

AGRICULTURAL USES OF ROTENONE INSECTICIDES.—On May 8, 1943, War Production Board Directive 15 was amended, delegating authority to the War Food Administrator to regulate or prohibit the use of rotenone in agriculture. The Directive defines rotenone as follows:

"Rotenone means the active insecticidal ingredients of the roots of derris, cube, barbasco, tuba, or timbo. The term includes both crude root in the form of root or of root which has been dried, broken, shredded, cut, or chipped, and processed rotenone in the form of finely ground or powdered crude rotenone, or in the form of liquid or solid extracts (or resins) obtained from rotenone."

(See War Letter for Entomology and Plant Quarantine, June 2, 1943)

On June 26, 1943, and effective that date, (published June 30, 1943) the War Food Administrator issued Food Production Order 13, dealing with the Agricultural Uses of Rotenone Insecticides. This order continues the provisions on the agricultural uses for rotenone insecticides prescribed in Conservation Order M-133, as amended, of the War Production Board.

Definitions.—Rotenone Insecticide is defined as follows:

"Rotenone insecticide" means any compound containing rotenone or the other active ingredients derived from the roots of derris, cube, barbasco, tuba, or timbo, combined with other liquid or dry materials, either active or inert: Provided, That such compound is suitable for use as an insecticide for the purposes set forth in paragraph (c) (1) hereof. /Paragraph (c) (1) relates to restrictions on delivery and use./

The order defines the terms "mixer" and "dealer" as follows:

"Mixer" means any person engaged in the production and sale of rotenone insecticides.

"Dealer" means any person engaged in selling rotenone insecticides to any other person for use, and includes a mixer insofar as he engages in so selling rotenone insecticides.

Permitted agricultural uses.--It prescribes that any mixer who obtains rotenone by allocation for the manufacture of agricultural insecticides "shall process, package, label or tag, and deliver such insecticides in conformity with the provisions of" the Food Production Order.

The order provides that unless otherwise specifically authorized or directed by the Deputy Administrator of the War Food Administration, rotenone insecticides may be delivered and used for the following purposes only:

(i) Commercial crops.

Peas--protection against the pea weevil and pea aphid.

Beans--protection against Mexican bean beetle.

Cole crops other than cabbage, including broccoli, brussels sprouts, cauliflower, kohlrabi, mustard, kale, turnips, and collards--for protection against caterpillars and aphids.

Sweet corn--for protection against the European corn borer.

(ii) Use on cattle for the specific control of the cattle grub (ox warble) or short-nosed cattle louse.

Certificate required for use.--The order prescribes that except for small quantities referred to below, deliveries of rotenone insecticides may be made only after a certificate of use has been signed by the purchaser. The form of the certificate shall be substantially as follows:

The undersigned purchaser hereby certifies to the War Food Administration and to his dealer, pursuant to Food Production Order No. _____, that the _____ lbs., or gals., of rotenone insecticide described below hereby ordered for delivery in _____, 194_, will be used for the following purposes only
(Month)

Description of insecticide _____

Name of purchaser

By _____
Duly authorized official

Title

Date

Small quantity exemption from certificate.---The order permits the delivery of not more than one pound rotenone insecticide in dry form or not more than one pint in liquid form without the signing of a certificate showing permitted use. It provides that no person shall use rotenone insecticide received by him pursuant to the order for other than permitted uses.

Restrictions on production of mixtures.---The order includes two restrictions on the production of mixtures of insecticides containing rotenone. These are: (1) The manufacture of a rotenone insecticide in which pyrethrum is incorporated; (2) the manufacturing or processing of a dust or powder with a rotenone content of more than one-half of one percent rotenone, subject to a variation of 10 percent when produced in accordance with standard commercial practice. Exception may be authorized or directed by the Deputy Administrator of the War Food Administration.

Restrictions on packaging.---The order provides that all rotenone insecticides delivered for agricultural uses, unless otherwise specifically authorized, shall be in packages which clearly display a label or suitable tag on which it is stated that the use of the material is restricted by Food Production Order No. 13 to the uses enumerated in the order which are also to appear on the label or tag. The substantial form of the statement to be on the label or tag is prescribed.

The order also provides that rotenone insecticides for agricultural purposes shall be delivered only in the original unbroken package which is labeled as prescribed by the order and State and Federal insecticide laws.

The order also provides that Deputy Administrator, War Food Administration may at any time, "in the interest of conservation and to provide for essential use", issue directions to mixers with respect to the size of package in which rotenone insecticides for agricultural uses may be packed.

Other requirements.---The order provides that mixers shall keep and retain for two years detailed records of production and deliveries of rotenone insecticides; that dealers shall keep the certificates as to use for two years; that mixers and dealers shall make reports, as required, to the Deputy Administrator, War Food Administration; and that mixers and dealers shall, upon request, submit their books, records and accounts for audit by duly authorized representatives of the Deputy Administrator of the War Food Administration.

It requires that mixers and dealers shall notify their customers of the provisions of the order.

It provides that persons "who wilfully violate" the order may be punished by fine and imprisonment upon conviction, and that by administrative suspension order, receipt of deliveries or selling may be prohibited.

It includes provision for petition for relief by presenting the case, in writing, to the Deputy Administrator, War Food Administration. The decision on such appeal shall be in writing and "final and conclusive."

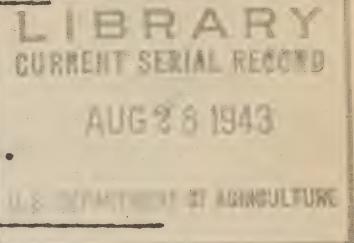
Communications and reports concerning the order "shall, unless instructions to the contrary are issued, be addressed to the War Food Administration, United States Department of Agriculture, Washington, D. C., Ref. FPA 13."

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July 10, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



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WAR PRODUCTION BOARD ORDER ON ROTENONE AMENDED.--On July 6, 1943 the Recording Secretary, War Production Board, amended Conservation Order M-133, dealing with rotenone. The amendment of Conservation Order M-133, which is enforced by the War Production Board, does not affect the agricultural use and distribution of rotenone insecticides which are covered by Food Production Order No. 13. (For provisions of this order, see War Letter for July 6, 1943)

The amended Conservation Order establishes procedures and practices that are to be followed by importers and processors dealing with rotenone. The order includes the following definitions:

"'Rotenone' means the active insecticidal ingredients of the roots of derris, cube, barbasco, tuba or timbo. The term includes:

"(i) 'Crude rotenone' in the form of root or of root which has been dried, broken, shredded, cut or chipped;

"(ii) 'Processed rotenone' in the form of finely ground or powdered crude rotenone; also in the form of liquid or solid extracts (or resins) obtained from crude rotenone.

"'Rotenone insecticide' means any compound containing rotenone combined with other liquid or dry materials, whether active or inert; provided that such compound is suitable for use as an insecticide.

"'Importer' means any person engaged in the importation of rotenone.

"'Processor' means any person engaged in producing or selling processed rotenone in any of the forms described in paragraph (a) (1) (ii) hereof."

The order continues the restriction on manufacture and processing of rotenone insecticides in the form of dust or powder included in the original order; it continues restrictions in reference to the processing of rotenone insecticides incorporating pyrethrum, included in the original order; it continues the provisions for the packaging of rotenone or rotenone insecticides included in the amendment of the original order.

The order provides that no importer or processor shall deliver or use rotenone and no person shall accept delivery of rotenone from an importer or processor except as specifically authorized or directed in writing by War Production Board, and prescribes the procedures, forms and information required to secure the authorization. It provides for the issuance of authorizations with respect to deliveries on a monthly basis insofar as practicable but permits exceptions at the discretion of the War Production Board.

It permits exceptions to the requirement for specific authorization on deliveries in any calendar month for amounts of not more than 5 pounds of processed rotenone in the solid form and not more than 1 gallon in the form of liquid extract.

The order is concerned primarily with importers and processors. The entomologists, pest control officials, and the end users of rotenone and rotenone insecticides are not directly concerned with the provisions of this order.

PREFERENCE ORDER ON SULFAMIC ACID REVOKED.--On July 6, 1943 the Recording Secretary, War Production Board, revoked General Preference Order M-242, dealing with sulfamic acid and sulfamic acid derivatives. The revocation states that this action shall not be construed as affecting in any way any liability or penalty accrued or incurred under the order.

For reference to the provisions of this order, see War Letter for June 2, 1943.

ANILINE ALLOCATION ORDER AMENDED.--On July 5, 1943, the Recording Secretary, War Production Board, amended Allocation Order M-184 dealing with aniline. The order defines "aniline" to mean "aniline, aniline oil, and the salts of aniline." It provides that no person (including any supplier) shall use aniline except as specifically authorized by the War Production Board, or for purposes stated in a use certificate for amounts delivered during August or calendar months thereafter between 500 and 5000 pounds, or without restrictions in amounts aggregating less than 500 in any calendar month. It outlines requirements and procedures in getting supplies.

Entomologists and pest control officials will be interested in this order primarily because of diphenylamine.

DELIVERY AND USE OF CASTOR OIL.--On June 30, 1943 the Acting Director of Food Distribution issued a supplement to Food Distribution Order 32, which deals with castor oil. The order provides that producers desiring authorization to deliver castor oil in any month shall file, on or before the fifteenth day of the preceding month, an application in prescribed form with the Fats and Oils Branch of the Food Distribution Administration.

CARS LOADED WITH POTATOES MAY NOT BE HELD FOR DIVERSION.---On July 1, 1943, the Secretary of the Interstate Commerce Commission issued Service Order 134 suspending the provision for diversion or re-consignment of cars loaded with potatoes. The order relates to diversion at Greenwich, Philadelphia, Pa. and affects shipments from the States of Delaware and Maryland (Eastern Shore). It is effective until revoked.

HAND FORCE OILERS FOR EARWORM CONTROL.---Under War Production Board Priority Regulation No. 19, 50 percent of the output of hand force oilers may be purchased for agricultural purposes from dealers who may have them in stock or who may be able to obtain them, during a 3 month period beginning June 7, 1943. A certificate from the County Rationing Board is not required but in making the purchase, the purchaser may be required to sign a certificate that the order is for farm use.

DELIVERY OF FUEL OIL TO OPERATE EQUIPMENT FOR WEED CONTROL PROHIBITED.---On June 23, 1943, the Deputy Petroleum Administrator for War issued Petroleum Distribution Order 13, governing the marketing of fuel oil. It provides that:

"No person shall transfer or accept a transfer of fuel oil for use in the operation of weed spraying or weed burning equipment for weed control purposes on any road, street, highway or railway right-of-way."

METHOD OF PREFERENCE RATINGS AMENDED.---On June 30, 1943, the Recording Secretary, War Production Board, amended Priorities Regulation No. 3. This amendment also made some changes in the items included in List A which covers items which may be produced and delivered without regard to preference ratings. This provided for additions of various types of chemicals used in the petroleum industry; vegetable, fish, marine animal, and animal oils; tall oil; fatty acids; and glycerine. All of the above-mentioned additions are also subject to Food Distribution Regulation No. 1 of the War Food Administration.

The principal items affected by the amendment of interest in insect control are certain oils used in connection with insecticides.

ICING OF POTATOES IN REFRIGERATOR CARS.---On June 28, 1943, the Secretary of Interstate Commerce Commission issued Service Order 126, Amendment 3, dealing with the icing of potatoes shipped in refrigerator cars. The initial icing, not to exceed 5,000 pounds of ice per car of cars of potatoes originating in Florida, Georgia, or South Carolina, is permitted. The initial icing, or reicing of cars of potatoes originating in Delaware, Maryland, New Jersey, North Carolina, Tennessee, or Virginia is not permitted.

On July 1, 1943 the Director, Bureau of Service, Interstate Commerce Commission issued Special Permit 1 under the above order, permitting the initial icing, not in excess of 5,000 pounds of ice per car, of potatoes originating in cars in Virginia and shipped to installations of the Armed Forces in the States of Alabama, Florida, Georgia, and South Carolina.

This is of interest in connection with plant quarantine requirements governing the movement of potatoes.

AIRPORTS OF ENTRY REDESIGNATED IN NEW YORK AND ALASKA.--On July 6, 1943 the Acting Secretary of the Treasury redesignated as airports of entry for civil aircraft and merchandise carried thereon the following two airports:

Niagara Falls Municipal Airport, Niagara Falls, N. Y.

Fort Yukon Airfield, Fort Yukon, Alaska

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August 5, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

ROTENONE FOR CONTROL OF CATERPILLARS ON CABBAGE.--On July 20, 1943 the War Food Administration sent a telegram to State entomologists, processors, and distributors of rotenone that the use of rotenone for the control of caterpillars on cabbage was added to the permitted uses listed in Food Production Order 13 as a relief measure. The notification requested cooperation in the use of other materials to conserve the supply of rotenone.

PYRETHRUM FOR CONTROL OF CELERY LEAF TIER.--On July 20, 1943, the War Food Administration sent a wire to State entomologists, processors and distributors of pyrethrum that the use of pyrethrum for the control of the celery leaf tier on celery was added to the permitted uses of pyrethrum listed in Food Production Order 11 as a relief measure. The wire stated that there were no prospects of additional allocations of pyrethrum for celery leaf tier control and that the supplies would be limited to the quantities now in the hands of distributors. The notification requested that other materials be substituted as far as possible to conserve the supplies of pyrethrum.

CHLORINATED HYDROCARBON REFRIGERANTS.--On July 10, 1943, the Recording Secretary, War Production Board, amended Conservation Order M-28 dealing with chlorinated hydrocarbon refrigerants. The amended order includes for the purpose of the order a definition of the term "insecticide manufacturer" as "any person who uses chlorinated hydrocarbon refrigerants in the production of insecticides." It classifies the uses of these refrigerants and prescribes procedures for securing deliveries, etc.

It is of interest to entomologists and pest control officials to know that the importance of these materials as insecticides is recognized. One of these refrigerants, "freon", is extensively used as the propellant of aerosols.

MOLASSES PREFERENCE ORDER AMENDED.---On July 21, 1943 the Recording Secretary, War Production Board, amended General Preference Order M-54 dealing with molasses. The amendment modifies the restriction on delivery to a "Class 1 purchaser" and does not modify the restrictions on the usual use of molasses in insecticides.

ALLOCATION ORDER FOR BENZENE AMENDED.---On July 23, 1943, the Recording Secretary, War Production Board, amended Allocation Order M-137 dealing with benzene. For the purpose of the order "'benzene' means the chemical compound known by that name or by the name 'benzol', from whatever source derived." The order provides that no person shall use benzene except as authorized by the War Production Board, with the provision that 50 gallons or less per any calender month may be used except as motor or other fuel. Procedures for allocations are revised.

ORDER ON AROMATIC PETROLEUM SOLVENTS AMENDED.---On July 28, 1943, the Recording Secretary, War Production Board, amended Allocation Order M-150 dealing with Aromatic Petroleum Solvents. The amended order modifies the definition of "Aromatic Petroleum Solvents" to include xylol, regardless of source from which derived, and "high-flash naphtha." It permits delivery without approval of application of 550 gallons of aromatic petroleum solvents other than those in toluene range for uses specified in the appended Schedule A, which is new. The schedule includes "Insect cloth." The amended order lightens the restrictions on these materials when used for treating textiles for the manufacture of insect cloth.

CRITICAL MATERIALS LIST.---On July 15, 1943 the Conservation Division, War Production Board, released Issue No. 9 of its Material Substitutions and Supply List. The issue states that increased production has resulted in an easier position for magnesium and certain non-ferrous metals and a number of important chemicals. In this issue no insecticides are listed under a special heading. Among the materials included in Group I, the supplies of which are insufficient, are: Copper*, Arsenic and Derivatives, Benzol and Derivatives*, Cresols*, Dichlorethyl Ether, Mannitol, Phenol and Derivatives*, Sorbitol, Xylol, Castor Beans, Castor Oil, Pyrethrum and Rotenone, those marked with an asterisk (*) being most critical. All these are in the same position as they were in the list of April 15, 1943. Ethylene Dichloride listed in Group I of the previous issue is not included in any list. Other materials commonly used in insecticides are in the same position as in the previous list, except lead, which has been placed in the supplementary list, which includes materials on which inventory restrictions have been eased by lifting the curtailment on inventory in Priority Regulation No. 1.

WAR PRODUCTION BOARD ORDER ON HONEY REVOKED.---On July 20, 1943, the Recording Secretary, War Production Board, revoked General Preference Order M-118 dealing with honey. This order has been superseded by Food Distribution Order 47, War Food Administration. The revoking of the War Production Board Order does not affect liabilities or penalties accrued or incurred under it.

MAXIMUM PRICES FOR CARBON TETRACHLORIDE.--On July 30, 1943 the Administrator, Office of Price Administration, revised Maximum Price Regulation 79, dealing with carbon tetrachloride and certain blends thereof. Four zones are defined and maximum prices established for each zone for carbon tetrachloride and for certain blends. The price for carbon tetrachloride in tank cars and listed containers for the four zones are tabulated as follows:

	Zone 1	Zone 2	Zone 3	Zone 4
	Price per pound	Price per pound	Price per pound	Price per pound
Tank cars -----	\$.0525	\$.0575	\$.0675	\$.06
	Price per gallon	Price per gallon	Price per gallon	Price per gallon
Carload lots:				
50-55 gallon containers -----	\$.73	\$.80	\$.94	\$.83
5 and 10 gallon containers -----	.97	1.04	1.17	1.07
Less than carload lots:				
50-55 gallon containers -----	.80	.87	1.00	.90
5 and 10 gallon containers -----	1.07	1.14	1.27	1.17

The prices for the various blends are not tabulated.

LIMITATION ORDER ON LABORATORY EQUIPMENT REVOKED.--On July 28, 1943, the Recording Secretary, War Production Board, revoked Supplementary Order L-144-a dealing with laboratory equipment.

ORDER PROHIBITING DIVERSION OF CARS OF POTATOES REVOKED.--On July 21, 1943, the Secretary, Interstate Commerce Commission, vacated and set aside Service Order No. 134 issued July 1, 1943 prohibiting the holding of cars of potatoes for diversion, reconsignment, and orders. This order had relation primarily to cars of potatoes being moved by the Pennsylvania Railroad Company and was of special interest in connection with the Japanese beetle quarantine.

STEEL SHIPPING DRUMS FOR INSECTICIDES.--On July 14, 1943 the Recording Secretary, War Production Board, amended Limitation Order L-197, which deals with steel shipping drums. The order prescribes, on the use of steel drums for insecticides in the appended schedule, the products that may be packed in steel drums. For the purpose of the order, "drum" means any single-walled cylindrical or bilged container with

a capacity of 110 gallons or less (including but not limited to buckets, kits and pails) constructed wholly of steel." Of the materials listed in the schedule, the following are of interest to entomologists: (1) "Insecticides, liquid, including fly spray and livestock dip and spray (except nicotine sulphate, arsenical cattle dips and grain fumigants)." On and after October 1, 1943, these materials may not be packed in new drums unless the drum has a capacity of not less than 2 nor more than 6 gallons and is constructed of 28 gauge steel or lighter. (2) Paradichlorobenzene shall not be packed in drums after September 14, 1942.

PREFERENCE ORDER ON NEW STEEL DRUMS AMENDED.---On July 17, 1943, the Recording Secretary, War Production Board, amended General Preference Order M-225 dealing with new steel shipping drums. The amended order excludes from the definition of "new drums" and the requirements governing them, "reject and second", which is defined as a drum "which cannot be used for the purpose for which it was intended due to some defect in material or manufacture." It also revokes certain miscellaneous provisions included in the previous order.

PREFERENCE ORDER ON WOODEN AND FIBER CONTAINERS AMENDED.---On July 14, 1943, the Recording Secretary, War Production Board, amended Preference Rating Order P-140 dealing with wooden and fiber shipping containers. The definitions of shipping containers are amended and the preference ratings modified when the containers are used for some commodities. The use of wooden and fiber containers for shipping the following insecticides is included in List 4 and assigned AA-4 rating:

Calcium arsenate; paradichlorobenzene; lead arsenate; and sulphur dust.

When packed without inner packing or wrapping in quantities of 10 gallons or more, containers used for honey are assigned AA-3 rating.

FIBER DRUMS ORDER AMENDED.---On August 2, 1943 the Recording Secretary, War Production Board, amended Conservation Order M-313 dealing with fiber drums. The amendment is concerned largely with changes in reporting requirements.

PRICE CEILINGS ON USED FRUIT AND VEGETABLE CONTAINERS REVISED.---On July 20, 1943, effective July 26, 1943, the Administrator, Office of Price Administration, revised Maximum Price Regulation 434 dealing with used wooden and fiber fruit and vegetable containers. The revised regulation provides maximum prices for used wood, fiber, or corrugated board fruit and vegetable containers to encourage collection, re-conditioning and re-use of these items. Previously, used containers were priced under the general maximum price regulation.

While the new maximums are higher than those formerly provided by the general regulation, in no case are they more than 80 percent of the maximums for the new containers. The ceilings have been established to further the Department of Agriculture's container salvage program.

Excepted from the new regulation are sales of used containers by farmers' cooperatives, and sales in Arizona, Utah, Nevada, California, Oregon and Washington. Such sellers are required to submit proposed prices to OPA for approval.

INCREASED CHARGES FOR FARM EQUIPMENT PARTS NOT TO AFFECT FARMER.---On July 17, 1943, the Administrator, Office of Price Administration, issued Amendment 8 to Maximum Price Regulation 246 dealing with Farm Equipment. The amendment provides that manufacturers of farm equipment parts are allowed to add emergency service charges to their ceiling prices through provisions announced by OPA. Such charges are limited to extra costs incurred to make delivery at the request of the purchaser on a date which would not have been possible without these extra costs. These costs may result from either the necessity of obtaining the same material from a more expensive source, or from the use of a substitute material, or for other valid reasons.

NEW FARM MACHINERY DISTRIBUTION 1943-1944.---On July 22, 1943, and then effective, the Deputy Administrator, War Food Administration, issued Supplementary Order 5 to Food Production Order 3 dealing with farm machinery and equipment. The supplement authorized manufacturers of farm machinery and equipment to distribute up to 40 percent of their production -- in the year beginning July 1, 1943 -- of items now listed for rationing under WPB order L-257, which provides for output of new machinery at an average of 80 percent of the 1940 production and permits unlimited production of repair parts. Under the order, manufacturers may distribute up to 40 percent of their production as they see fit through normal distribution channels. However, they are first required to fill quotas issued to them by the WFA which were designed to place rationed items of farm machinery and equipment where they would be needed to satisfy State and County quotas established under last year's machinery distribution program. This refers to machinery produced under WPB order L-170.

The press release includes the following comment: "WFA officials said that today's action is a step toward a simplified program for distribution of farm machinery and equipment in the year ahead. A permanent program will be announced in the near future, which will take into consideration the greater production of farm machinery and equipment scheduled this year."

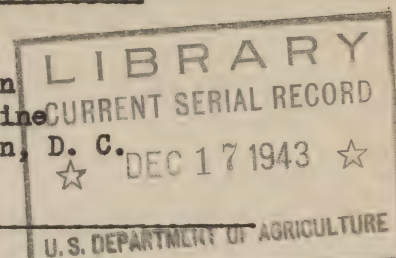
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October 25, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

AGRICULTURAL USES OF ROTENONE INSECTICIDES

Complying with a request from the War Food Administration, the Bureau of Entomology and Plant Quarantine prepared a statement on the agricultural uses of rotenone insecticides. This statement was accompanied by a table giving estimates of the quantities of this insecticide (in terms of root containing 5% rotenone) used for various purposes in 1942, and estimated requirements for 1944. Information supplied by cooperating state officials and others was freely used in making these estimates. It is believed appropriate, therefore, that the statement and accompanying tabulation be made available for the information of those who receive the War Letter. It is, however, not released for general distribution, nor may it be published in whole or in part without specific approval from the Chief, Bureau of Entomology and Plant Quarantine.

The full statement is given below.

"September 11, 1943

"ROTENONE INSECTICIDES

"(Prepared by Bureau of Entomology and Plant Quarantine. Submitted in response to a request for information and comments, received by E. C. Auchter, Administrator, Agricultural Research Administration, from M. Lee Marshall, Deputy Administrator, War Food Administration, under date of June 9, 1943.)

"The following statement supplements the remarks on rotenone insecticides included in a memorandum submitted by Dr. Auchter to Mr. Marshall on August 19, 1943. It includes: (1) Comments on the accompanying tabulation of the agricultural uses of rotenone insecticides; (2) a discussion of the prescribed requirement limiting the rotenone content of mixed dusts; and (3) comments on the size of package for small lots of rotenone insecticides.

"(1) Comments on the accompanying tabulation of agricultural uses of rotenone insecticides.

"Rotenone insecticides are used to control so many kinds of agricultural pests under such diverse conditions that no satisfactory basis can be established by which a numerical priority rating can be assigned to each use. The necessity for each use depends on a wide number of factors, and any assignment of a preference rating to each use can only be an opinion and of transitory value. The various uses can, however, be arranged into groups, and this has been done in the accompanying tabulation. The agricultural uses are divided into four groups, and the amounts used for non-agricultural purposes in 1942 and estimated requirements for 1944 are placed in a fifth category. The arrangement of the uses in the several groups suggests a general order of preference, but there is, however, little difference between the importance of the need for rotenone insecticides for the several uses within a group. The emphasis that is placed will depend on the importance of the protection needed from insects to meet our current food and material supply needs. To illustrate, if supplies of peas become adequate, and beef and leather supplies do not meet requirements, the emphasis on the need for rotenone insecticides to control cattle grub would be greater than on the control of pea weevil and pea aphid.

"Certain of the important uses of rotenone insecticides are for the control of specific pests which attack crops in special areas or under special conditions. For some of these uses the urgency of the need depends on factors that cannot be accurately appraised far in advance; yet, as conditions develop, the availability and use of this insecticide may have an important and significant bearing on production of needed food supplies. For example, the potato flea beetle may be held in check in some years and in some areas by the use of other materials, but, under conditions favorable for its development, it may seriously interfere with crop production in some seasons or areas unless rotenone is available for its control.

"A wide variety of factors must be considered in appraising the essentiality of rotenone insecticides, and there are uncertainties as to the amounts needed and actually used. The estimated requirements for 1944 are based on the average seasonal occurrence of the pests listed and the expected use of rotenone insecticides. Availability of labor and equipment has also been considered in the preparation of these estimates.

"In the development of any end use plan based on the enumerated estimated requirements in comparison with expected supplies, the rigid adherence to the estimated requirement figures above selected horizontal lines might not result in the greatest protection to crops and yield of acceptable food supplies. Flexibility of usages of insecticides is essential to effective insect control, and restrictions on usages along narrow lines may defeat the purpose of

any provision for crop protection from insect depredation. The need is for the proper insecticide applied at the proper time. This need is often dictated by the rapidity of the build-up of insect populations, and the fluctuation of insect abundance from season to season and from region to region within the season.

"Entomologists throughout the country are concerned with the control of insects and with aiding in all ways that they can to attain maximum production. To do this they need to prepare and distribute recommendations for the control of pests in advance of the season when the control should be applied. They also need to know if the materials they would recommend can be secured. When restrictions are placed on the use of specific insecticides, the State and Federal agencies responsible to advise growers are handicapped, and neither the grower nor consumer secures full benefit when exceptions are later made and restrictions modified. Materials needed cannot always be supplied in the short interval required to give desired protection.

"Rotenone insecticides used by growers have to be processed and distributed by the industry. Industry is in a better position to aid in supplying the proper material if it can plan for all uses that may be authorized. Limiting the number of uses, and later making exceptions and modifications, does not encourage industry to develop sales and distribution in an orderly manner.

"With this as a background and with two seasons' experience in rigidly restricting the use of rotenone insecticides, it is believed that careful consideration should be given before similar rigid restrictions are issued to control its use during 1944. It is thought that it will be in the interest of maximum food production if its use is authorized for the various purposes listed in the first three groups set up in the accompanying tabulation.

"The accompanying table shows the form in which rotenone insecticides are generally applied for the various uses and the time of the year when the applications are made. Ground crude root mixed with water and applied as a spray is the most effective usage for many of the pests. Conditions under which the crop is grown and the availability of equipment dictate the form of usage, however, and a large portion of the rotenone insecticides is applied as dust mixtures. Whether used in the form of a dust or spray it is important that the content of the active ingredient, rotenone, be sufficient to assure effective control. This is important. The use of lesser amounts of rotenone with ineffective additives is not in the interest of economy of material or the control of the insect. Specialized dust materials and extracts have, as a rule, proved to be effective only when the rotenone content has been equal to that recommended for ground root.

"The estimate of the amount used for 1942, which is included in the accompanying table for comparative purposes, is based on information supplied by cooperating state agencies, supplemented by information from field offices of the Bureau and data supplied by some members of industry.

"(2) Discussion of the prescribed requirement limiting the rotenone content in mixed dusts.

"Reports from several agencies, observations by employees of the Bureau, and data accumulated from various sources during the past season give support to a general conclusion that the effort to standardize mixed dusts to a rotenone content of 0.5 percent has failed as a conservation measure--the purpose sought. When the plan was proposed, it was generally recognized that it would be necessary to increase the rate per application to secure control of certain pests, but that 0.5 percent mixture would give adequate control of others. It was thought the objection to use extra material per acre could be overcome, and consequently available supplies would go further, accompanied by satisfactory control. Experience of the season does not support this.

"The reaction of the growers to the 0.5 percent mixture has been significant. There are many reports which show that they did not believe the 0.5 percent dust would give desired control, and as a result they applied the material at rates per acre greater than they would have applied the dust of higher rotenone content that they were accustomed to using. This resulted in loss of time and labor and involved additional cost and effort in transporting and handling inert materials.

"For a number of the pests that are controlled by mixed rotenone dusts the threshold of effectiveness, especially under the conditions under which the dusts are applied by the grower, is close to 0.5 percent rotenone content. To assure effective control it is, therefore, necessary that special care be used in applying the insecticide, and some of the reported failures to secure control may be attributed to inadequate equipment and inexperienced labor. There is no reason to believe both these conditions will be normal next year.

"Some cases have been reported which indicate that certain manufacturers have used this specified rotenone content of mixed dust as an enthusiastic excuse to so conserve rotenone that the trend of the dust mixtures has been downward from the 0.5 percent specified to as low as a marketed product with a rotenone content of 0.125 percent. The toxicity of some of these low rotenone mixtures has not been compensated for by effective additives. This resulted in reduced production and the grower lost both labor and cash.

"It is recommended, therefore, that the rotenone content of mixed dust not be specified. It is thought that the limit on supplies will be sufficient to stimulate mixers to keep the content as near the threshold of effectiveness as they can and that the elimination of the requirement will remove any excuse for the production of an ineffective dust mixture.

"(3) Comments on size of package suitable for marketing rotenone insecticides intended for use on farm, home, and community gardens.

"Information available to us on the size of package suitable for marketing rotenone insecticides secured for use on farm, home, and community gardens indicates that there is wide variation in various parts of the country and in the sizes offered by different manufacturers. It would appear that custom and practice have developed somewhat diversely in various areas. This is not illogical, since size and the purpose of gardens naturally differ, depending on locality and conditions prompting their planting. For a country-wide basis it is not believed that the information available to us is sufficiently adequate to permit specific recommendation on the size of package which can best be used for this purpose. It is also understood that the matter of securing containers is presenting an important problem to the industry. If so, to standardize specified sizes would involve consideration of available supplies. Considering the absence of fully adequate information and other factors, it is suggested that instead of specifying package sizes for rotenone insecticides intended for use to control pests in farm, home, and community gardens, the size of the package be that which is convenient to fit the needs of the growers and the industry.

"In any consideration of package size it would be advisable to keep the following in mind:

"(a) In general, rotenone dust mixtures are applied at the rate of approximately 20-25 pounds per acre, or at a rate of 3 ounces to each 100 feet of row.

"(b) Rotenone sprays are prepared usually at the rate of 2 pounds of root containing 5 percent rotenone for each 100 gallons of water. These sprays are applied at the rate of approximately 100 gallons per acre, or approximately 3 quarts of spray per 100 feet of row.

"(c) As a rule, more than one application has to be applied before the crop is harvested and in many cases several applications are applied. To illustrate, four treatments may be necessary to protect a bean crop from bean beetle, and five or six to protect cabbage from cabbage worms. Where there is a succession of planting, the number of applications may be subject to considerable variation."

September 2, 1943

ROTENONE INSECTICIDES

(Prepared by the Bureau of Entomology and Plant Quarantine as part of a request for information on certain insecticides included in a memorandum dated June 9, 1943 from M. Lee Marshall, Deputy Administrator, War Food Administration, to E. C. Auchter, Administrator, Agricultural Research Administration)

USES OF ROTENONE IN AGRICULTURE, AND ESTIMATED REQUIREMENTS FOR 1944, IN TERMS OF GROUND ROOTS CONTAINING 5 PERCENT OF ROTENONE

Use - Crop and insect	Used in 1942 <u>Pounds</u>	Estimated requirements for 1944 <u>Pounds</u>	Form needed or usually used	When used
Group I - Crops (including livestock) of major importance for which rotenone is essential:				
PEAS, food, seed, and Austrian for the pea weevil	622,000	875,000	Dust mixtures	May-July
COLE CROPS for cabbage worms, aphids, flea beetles and harlequin bug	400,000	475,000	Dust and spray mixtures	Throughout year
PEAS, food and seed, for the pea aphid	235,000	525,000	Root sprays and dust mixtures	April-August
CATTLE for cattle grub	150,000	750,000*	Washes and sprays from root or extract; dusts from root with carrier	November-April
BEANS for bean beetles	725,000	725,000	Sprays and dust mixtures	April-October
VEGETABLES for insects in home, farm, and community gardens	710,000	1,000,000	Sprays from extracts or roots, and dust mixtures	Throughout year
Totals for Group I	2,842,000	4,350,000		

*For treating period November 1944 through April 1945.

Uses of rotenone in agriculture, and estimated requirements for 1944, in terms of ground roots containing 5 percent of rotenone

Use - Crop and insect	Used in 1942 <u>Pounds</u>	Estimated requirements for 1944 <u>Pounds</u>	Form needed or usually used	When used
Group II - Crops (including livestock) of major importance for which rotenone is essential in certain areas or under unusual seasonal or outbreak conditions:				
ASPARAGUS for asparagus beetle on market shoots	50,000	100,000	Dust mixtures	April-May
SWEET CORN for European corn borer	40,000	50,000	Root spray-root dust mixtures	June-September
CATTLE for short-nosed cattle louse	25,000	25,000	Dips from roots or extracts	October-April
POTATOES for flea beetles	262,000	350,000	Sprays and dust mixtures	April-August
POTATOES, CERTIFIED SEED for aphids	50,000	50,000	Spray and dust mixtures	July-August
LAMBS for sheep tick	30,000	45,000	Sprays or dips, extracts or roots	December-April
PEARS, PLUMS, and PRUNES for thrips	20,000	20,000	Spray or dust mixtures	March-June
APPLES and OTHER DECIDUOUS FRUITS for Pacific mite	15,000	15,000	Sprays	May-August
PEACHES, GRAPES, and SMALL FRUITS for Japanese beetle	10,000	10,000	Root spray	June-August
TOMATOES for Colorado potato beetle and flea beetle	40,000	50,000	Spray or dust mixtures	April-June
Totals for Group II	542,000	715,000		

Uses of rotenone in agriculture, and estimated requirements for 1944, in terms of ground roots containing 5 percent of rotenone

Use - Crop and insect	Used in 1942 <u>Pounds</u>	Estimated requirements for 1944 <u>Pounds</u>	Form needed or usually used	When used
Group III - Crops of less than major importance for which rotenone is essential:				
STRAWBERRIES for spittle bugs	32,000	70,000	Dust mixtures	April-June
RASPBERRIES and OTHER BRAMBLES for raspberry fruitworm	50,000	50,000	Dust or spray mixtures	May-July
CRANBERRIES for various insects	10,000	10,000	Dust mixtures	May-August
CURRANTS and GOOSEBERRIES for gooseberry fruitworm	15,000	15,000	Spray and dust mixtures	May-June
BLUEBERRIES for blueberry maggot	25,000	25,000	Dust mixtures	June-July
LETTUCE for loopers	25,000	25,000	Spray or dust mixtures	Spring and fall
CHERRIES for fruitfly	10,000	10,000	Root spray	June-July
Totals for Group III	167,000	205,000		

Uses of rotenone in agriculture, and estimated requirements for 1944, in terms of ground roots containing 5 percent of rotenone

Use - Crop and insect	Used in 1942 <u>Pounds</u>	Estimated requirements for 1944 <u>Pounds</u>	Form needed or usually used	When used
Group IV - Agricultural uses of rotenone which are desirable but not essential for food production:				
TOBACCO for flea beetles	10,000	100,000	Dust mixtures	March-September
CUCURBITS for miscellaneous insects	100,000	150,000	Spray or dust mixtures	Throughout year
SPINACH for miscellaneous insects	9,000	9,000	Spray or dust mixtures	Fall
GREENHOUSE VEGETABLES for miscellaneous insects	35,000	40,000	Spray, dusts, and extracts	Throughout year
PEPPERS for aphids	14,000	50,000	Dust mixtures	March-September
EGGPLANT for flea beetles	5,000	5,000	Spray or dust mixtures	May-September
CELERY for miscellaneous insects	31,000	31,000	Spray or dust mixtures	Spring, fall, and winter
SHADE TREES for miscellaneous insects	50,000	150,000	Sprays	April-August
CITRUS for scale insects and aphids	16,000	16,000	Extracts in oil	Spring and fall
FLOWERS and ORNAMENTAL SHRUBS in home gardens, commercial plantings, and nurseries for miscellaneous insects	200,000	250,000	Sprays, including extracts, or dusts	Throughout year
HOPS for aphids	15,000	15,000	Spray or dust mixtures	April-July
COTTON for aphids	0	50,000	Dust mixtures	June-August
LAWNS and GOLF GREENS for chinch bugs	8,000	8,000	Dust mixtures	June-September
Totals for Group IV	493,000	874,000		

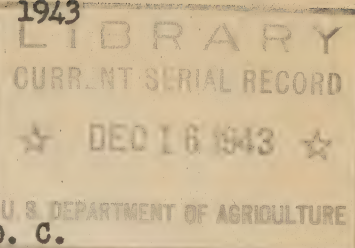
Uses of rotenone in agriculture, and estimated requirements for 1944, in terms of ground roots containing 5 percent of rotenone

Use - Crop and insect	Used in 1942 <u>Pounds</u>	Estimated requirements for 1944 <u>Pounds</u>	Form needed or usually used	When used
Totals for agricultural uses	4,044,000	6,144,000		
Non-agricultural uses not itemized	460,000	240,000		
Totals for all uses	4,504,000	6,384,000		

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November 16, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



1-4
This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

AGRICULTURAL USES OF PYRETHRUM

Complying with a request from the War Food Administration, the Bureau of Entomology and Plant Quarantine prepared a statement on the agricultural uses of pyrethrum insecticides. This statement was accompanied by a table giving estimates of the quantities of this insecticide (in terms of pyrethrum flowers containing 1.3% of total pyrethrins) used for various purposes in 1942, and estimated requirements for 1944. Information supplied by cooperating state officials and others was freely used in making these estimates. It is believed appropriate, therefore, that the statement and accompanying tabulation be made available for the information of those who receive the War Letter. It is, however, not released for general distribution, nor may it be published in whole or in part without specific approval from the Chief, Bureau of Entomology and Plant Quarantine.

The full statement is given below.

"AGRICULTURAL USES OF PYRETHRUM INSECTICIDES

"Prepared by the Bureau of Entomology and Plant Quarantine

"(Submitted in response to a request for information and comments received by E. C. Auchter, Administrator, Agricultural Research Administration, from M. Lee Marshall, Deputy Administrator, War Food Administration, under date of June 9, 1943.)

"This statement supplements the comments on pyrethrum insecticides included in Dr. Auchter's memorandum to Mr. M. Lee Marshall of August 19, 1943 on the 1944 Insecticide Program. The comments in that statement covered in a general way the importance of pyrethrum insecticides, with specific reference to their use in agriculture. Reference was made to the possible shortage of supplies, the agricultural uses of pyrethrum permitted by Food Production Order 11, and the need of substituting other materials for the agricultural uses of pyrethrum as far as possible. The comments included the following two sentences:

'Preliminary consideration indicates that there are at least 12 important uses for pyrethrum in agriculture for which suitable substitutes are not available. . . . Tentative estimates of the amount of pyrethrum, in terms of flowers containing 1.3 percent pyrethrins, indicate that 1,300,000 pounds would be used for the purpose of protecting crops from insects which can be effectively controlled only by the use of pyrethrum.'

"The agricultural uses of pyrethrum have been critically analyzed since that time with the idea of determining the important agricultural uses for pyrethrum for which no substitute is available. In this connection, consideration has also been given to the availability of the material that might be used as a substitute. The appraisal and review disclose that there are 15 agricultural uses for which no practicable substitute is available. These uses include, however, a number of food crops of less than major importance and two uses which provide protection from insects attacking tobacco. To aid in appraising the importance of these and other agricultural uses of pyrethrum, the accompanying tabulation divides the agricultural uses into six categories. Four of these categories refer to uses for which no substitute is available. The amount of pyrethrum flowers containing 1.3 percent pyrethrins estimated that will be used in 1944 for the 15 uses in the four categories if supplies are available is 1,180,000 pounds, of which only 990,000 pounds would be used on food crops, two of these being celery and mushrooms, for which 123,000 pounds might be used. Included within the uses on food crops for which no substitute is available are uses for the control of insects which do not cause extensive losses throughout the country but attack crops of major importance and cause significant damage and loss in certain areas or under unusual seasonal or outbreak conditions. The amount of pyrethrum that may be used for the control of certain of these pests depends to a large extent on conditions. The past pattern of use, therefore, is not as helpful in estimating amounts that may be used for these purposes as where the average annual use pattern has been more uniform.

"The accompanying table of the uses of pyrethrum in agriculture in 1942 and the estimated amounts which would be used for the various purposes in 1944 is based on information available as a result of research and observations of specialists of the Bureau, including those at its various field laboratories, supplemented by data supplied by cooperating state agencies, members of the industry, and others acquainted with these uses. In estimating the amounts that would be used in 1944 if supplies were available, consideration has been given to information in reference to past patterns of use over a period of years; what may be the status and importance of the various pests under conditions of production that may prevail; and such information as is available on the estimated acreages and importance of various kinds of crops that can be protected from insects that may be controlled by the use of pyrethrum.

"Pyrethrum is one of the oldest insecticides. Extended use of it to control crop pests in the United States, however, is comparatively recent. These uses have, to a considerable extent, followed its use for the control of insects attacking or annoying man and frequenting his habitations and the use for the control of flies attacking livestock. The use to combat insects attacking crops was stimulated in comparatively recent years with the standardization of the quality of the products offered for sale at prices the farmer considered reasonable for the protection he secured. Another factor which affected the more general use of pyrethrum insecticides to control insects on crops is the recognition of the need for using insecticides which did not leave residues toxic to man on the marketed product. Notwithstanding the rather recent development of the use of pyrethrum for the control of agricultural crop pests, extensive experimentation has disclosed that it is the only insecticide now available which can be effectively used for the control of certain kinds of insects that cause important crop losses. It is of prime importance for the control of leafhoppers, various kinds of plant bugs, and for certain leaf-feeding larvae which are destructive to leafy crops that should not be contaminated with insecticidal residues toxic to humans when marketed or used for food. Pyrethrum also has an important place among the agricultural insecticides because of properties it contains which stimulate activity of certain insects, forcing them to become exposed so they come in contact with materials toxic to them.

"When the supplies of pyrethrum flowers are limited, as they are at present, determination of the importance of having pyrethrum insecticides available to protect crops from losses that may be caused by insects should include an appraisal of the relative value of the crop to be protected and the need for securing maximum yields of these crops. This requires consideration of many factors, most of which are outside the field of entomology. In making such appraisal it is important, however, to keep in mind the losses that may be caused by the various insect pests. It should be recognized that the damage that may be caused by the insects may not result in a 100% destruction of the crop, even in local areas where the infestation is greatest. The need of preventing insect losses to assure maximum yield and return for labor is highly important. The absence of fully effective control, however, does not necessarily mean total loss. It should also be fully recognized that many farmers, and particularly those in certain areas, have come to rely upon the use of pyrethrum insecticides to control certain pests, and there are some who may conclude that if this insecticide is not available when needed the return from the crop will not justify planting. The slowness with which some growers accept substitute materials, even when they can be effectively used, should not, however, be overlooked.

"Available information on the quantity of pyrethrum that may be imported clearly indicates that the supplies of this insecticide will not be sufficient to provide for the control of pests that present high health hazard to man. It is clear, therefore, that the fullest possible use will have to be made of substitutes for all the normal uses of this valuable insecticide. In considering the uses of pyrethrum insecticides in agriculture and in other fields it is, however, important to recognize that the active insecticidal ingredients of pyrethrum flowers are the pyrethrins. If the pyrethrin content of the insecticide is not sufficient to be effective, or its effectiveness increased by activators of proved worth, the usefulness of the material that may be applied is of doubtful value. The use of insecticides in which the amount of the toxic ingredient is below that required to give control is bound to result in disappointment and a waste of money, time; and labor. Experimentation with materials that activate pyrethrins, and experimentation with other toxicants that may be combined with them are inadequate to point to combinations of materials containing a pyrethrin content less than that required to give control that are effective for the control of most of the insects attacking crops.

October 21, 1943"

October 19, 1943

PYRETHRUM INSECTICIDES

(Prepared by the Bureau of Entomology and Plant Quarantine in partial reply to a request for information on certain insecticides, received in a memorandum dated June 9, 1943 from M. Lee Marshall, Deputy Administrator, War Food Administration, to E. C. Auchter, Administrator, Agricultural Research Administration.)

Uses of pyrethrum in agriculture in 1942, and estimated requirements for 1944,
in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins.

Crop or use, and insect combated	Used in 1942 (Pounds)	Estimated use in 1944 if supplies available (Pounds)
A. AGRICULTURAL USES		
I. Food crops of major importance for which no substitute is available, and pyrethrum is essential for the pro- tection of crops from insects causing important losses		
BEANS for leafhoppers	200,000	200,000
POTATOES for leafhoppers	<u>75,000</u>	<u>150,000</u>
Subtotal, Group I	<u>275,000</u>	<u>350,000</u>
II. Food crops of major importance for which no substitute is available, and pyrethrum is essential for the pro- tection of crops from insects causing important losses in certain areas or under unusual seasonal or outbreak conditions		
Diabrotica beetles attacking RIPENING FRUIT	12,000	12,000
Diabrotica beetles attacking BEANS ON WEST COAST	12,000	10,000
SPINACH for webworms	60,000	60,000

continued

Uses of pyrethrum in agriculture in 1942, and estimated requirements for 1944,
in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins.

Crop or use, and insect combated	Used in 1942 (Pounds)	Estimated use in 1944 if supplies available (Pounds)
GRAPES in California for leafhoppers	118,000	100,000
Beet leafhopper control in restricted uncultivated areas for protection of SUGARBEETS AND TOMATOES from curly top losses	40,000	40,000
VEGETABLES in home, farm, and community gardens for the control of leafhoppers, plant bugs, and webworms	<u>100,000</u>	<u>125,000</u>
Subtotal, Group II	<u>342,000</u>	<u>347,000</u>
III. Food crops of less than major importance for which no substitute is available, and pyrethrum is essential for protection of crops from insects causing important losses		
CRANBERRIES for leafhoppers, fireworms, etc.	140,000	140,000
CELERY for leafhopper and garden flea hopper	63,000	63,000
MUSHROOMS for mushroom flies	40,000	60,000
VEGETABLE SEED CROPS, INCLUDING SUGARBEETS FOR SEED, for leafhoppers and plant bugs	15,000	20,000
CUCURBITS for squash bug	<u>10,000</u>	<u>10,000</u>
Subtotal, Group III	<u>268,000</u>	<u>293,000</u>

continued

Uses of pyrethrum in agriculture in 1942, and estimated requirements for 1944,
in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins.

Crop or use, and insect combated	Used in 1942 (Pounds)	Estimated use in 1944 if supplies available (Pounds)
IV. Major non-food crop uses for which no substitute is available and pyrethrum required for protection from important insect losses		
TOBACCO IN OPEN WAREHOUSES for tobacco moth	150,000	150,000
TOBACCO for thrips on shade-grown tobacco	<u> </u>	<u>40,000</u>
Subtotal, Group IV	<u>150,000</u>	<u>190,000</u>
V. Food crop uses (including livestock and stored cereal prod- ucts) which are desirable but for which required protection can be secured by substitutes		
VEGETABLES in home, farm, and community gardens for various pests, other than leafhoppers, plant bugs, and webworms	300,000	375,000
SWEET CORN AND SEED CORN for corn earworm	22,000	75,000
Greenhouse thrips on CITRUS	39,000	39,000
Greenhouse thrips on SUBTROPICAL FRUITS OTHER THAN CITRUS	13,000	13,000
DECIDUOUS TREE FRUITS for thrips and cankerworms	22,000	22,000
LIVESTOCK AA Sprays	1,300,000	1,350,000
LETTUCE for loopers	15,000	50,000
COLE CROPS for caterpillars	75,000	100,000

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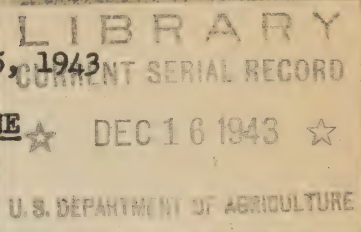
Uses of pyrethrum in agriculture in 1942, and estimated requirements for 1944,
in terms of pyrethrum flowers containing 1.3 percent of total pyrethrins.

Crop or use, and insect combated	Used in 1942 (Pounds)	Estimated use in 1944 if supplies available (Pounds)
CUCURBITS for worms, and cucumber beetles	40,000	40,000
GREENHOUSE VEGETABLES for miscellaneous insects	50,000	50,000
SMALL FRUITS, INCLUDING BRAMBLES AND GOOSEBERRIES (EXCEPT CRANBERRIES) for miscellaneous insects	25,000	25,000
STORED CEREAL INSECTS in mills, warehouses, and bins	<u>1,000,000</u>	<u>450,000</u>
Subtotal, Group V	<u>2,901,000</u>	<u>2,589,000</u>
VI. Non-food crop uses which are desirable but for which pyrethrum is not essential		
TOBACCO for potato flea beetle on shade-grown tobacco	—	40,000
LAWNS AND GOLF GREENS for webworm and chinchbug	22,000	22,000
SHADE TREES AND ORNAMENTALS	15,000	15,000
FLOWERS for miscellaneous insects	<u>450,000</u>	<u>400,000</u>
Subtotal, Group VI	<u>487,000</u>	<u>477,000</u>
TOTAL, AGRICULTURAL USES	<u>4,423,000</u>	<u>4,246,000</u>
B. NONAGRICULTURAL USES (Unitemized)	<u>2,000,000</u>	
GRAND TOTAL	<u>6,423,000</u>	

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November 25, 1943

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE



From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

ORDER ON AGRICULTURAL USES OF ROTENONE AMENDED

On November 22, 1943 the Assistant War Food Administrator issued Revision No. 1 of Food Production Order 13 dealing with the agricultural uses of rotenone. The revised order, which is rewritten in entirety, is effective on issue and is published in the Federal Register for November 23, 1943.

Definition of rotenone insecticides.—For the purpose of the order rotenone insecticide is defined as follows:

"'Rotenone insecticide' means any compound containing rotenone or the other active ingredients derived from the roots of derris, cube, barbasco, tuba, or timbo, combined with other liquid or dry materials, either active or inert, which compound is suitable for use as an insecticide."

Permitted agricultural uses.—The agricultural uses of rotenone insecticides permitted by the order are:

- (i) Commercial crops. Peas (food, seed, and Austrian)—for the pea weevil and the pea aphid.

Cabbage and other cole crops—for worms, aphids, flea beetles, and harlequin bug.

Beans—for bean beetles.

Asparagus—for asparagus beetles on market shoots.

Sweet corn—for European corn borer.

Peaches, grapes, and small fruits—for Japanese beetle.

Strawberries—for spittle bug.

Raspberries and other brambles—for raspberry fruit worm.

Currants and gooseberries—for gooseberry fruit worm.

Cherries—for fruit fly.

Blueberries—for blueberry maggot.

(ii) Non-commercial crops. Vegetables and small fruits—for insects and mites in farm, home, and Victory gardens.

(iii) Animal uses. Cattle—for cattle grub and cattle lice.

Lambs—for sheep tick.

(iv) Experimental purposes. Use by any Federal, State or other established research organization for experimental purposes only.

(v) Other agricultural uses. Such other agricultural uses as the Director may authorize.

Purchases for non-commercial crops restricted.--The order restricts the amount of rotenone insecticide that may be purchased at any one time for use on non-commercial crops in farm, home, or Victory gardens to not more than 5 pounds in finished dust form or to not more than 1 pint in liquid form.

Rotenone content prescribed.--The order provides:

- (a) That no person shall use any rotenone insecticide as a dust on non-commercial crops in farm, home, or Victory gardens containing more than 0.5 percent rotenone.
- (b) That unless authorized by the Director no person shall use any rotenone insecticide for other permitted purposes that contains more than 0.75 percent rotenone except for the following:
 - (i) European corn borer—not more than one percent of rotenone;
 - (ii) Cattle grub—not more than two and one-half percent of rotenone;
 - (iii) Experimental uses—any percentage of rotenone content.
- (c) That rotenone dusts or powders with a rotenone content greater than three-fourths of one percent may be diluted in water by the user and applied as a spray or wash. Any person may use rotenone insecticides containing other active ingredients, activators or wetting agents.

Certificate of use required.--The order provides that, where the quantity purchased at any one time is more than 5 pounds of finished dust or 1 pint in liquid form, no dealer shall deliver any rotenone insecticide to any person until he receives a certificate of use signed by the purchaser. The certificate shall be in substantially the following form and the trade name of the insecticide must be on the certificate:

The undersigned purchaser hereby certifies to the War Food Administration and to his dealer, pursuant to Food Production Order No. 13, Revision No. 1, that the _____

(pounds--)

_____ of rotenone insecticide described
(gallons)

below hereby ordered for delivery in

_____, 194____, will be used for the fol-

(Month)

lowing purposes only _____

Description of insecticide _____

(Name of Purchaser.)

(Date)

Deliveries must be in original container.--The order provides that "No dealer shall deliver any rotenone insecticide pursuant to this order except in the original unbroken package, . . ."

Provision made for appeal for relief.--The order provides that:

"Any person affected by this order who considers that compliance with this order would work an exceptional and unreasonable hardship on him may apply in writing for relief to the Director, setting forth in such petition all pertinent facts and the relief sought. The Director, upon the basis of such application and other information, may take such action as he deems appropriate. The decision of the Director shall be in writing and shall be final and conclusive."

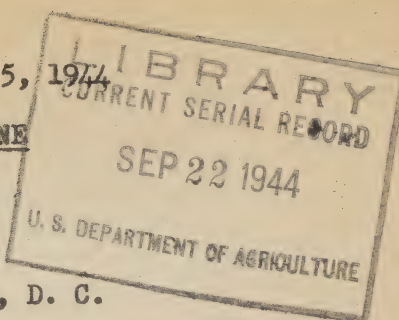
Miscellaneous provisions.--The order includes provision for:
(a) Dealer's records and reports; (b) audits and inspections;
(c) penalties for violation; and provides that communications concerning the order be addressed to the Office of Materials and Facilities, War Food Administration, Washington 25, D. C., Ref. FPO 13.

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September 15, 1944

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.



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ORDERS DEALING WITH INSECTICIDAL CHEMICALS REVISED

War Production Board has recently issued a series of orders revising previous orders dealing with certain chemicals used for insecticidal purposes. The revisions for the most part are concerned with administrative practices and group under one general heading the various orders dealing with chemicals. Heretofore separate orders have covered certain insecticidal chemicals. Under the present plan they are to be made part of General Allocation Order M-300 which deals with chemicals and includes sections dealing with specific chemicals. These sections are referred to as schedules. There follow brief statements in reference to each recent change:

Rotenone.—On September 13, 1944, the Recording Secretary, War Production Board, issued Schedule 49 to General Allocation Order M-300. This schedule deals with rotenone. The schedule revokes previous order M-133 which dealt with rotenone and had been in effect since January 23, 1943. The revised order dealing with rotenone is essentially the same as the preceding order M-133. It prescribes the methods by which the suppliers shall make application to War Production Board for delivery. The application form for "use or acceptance" and for "restrictions on manufacture and processing" of rotenone refer to agricultural use and distribution of rotenone supplies. Requests for rotenone supplies shall be filed on Form WPB-2946 (formerly PD-601). Applications for use or acceptance shall be filed on Form WPB 2945 (formerly PD-600). Allocations are made on a monthly basis. Requests for allocations shall include information on what the material requested will be used for. If insecticides are to be produced, specify kinds of insecticide in terms of insect and animal or crop, and whether it will be for small or large size package.

An important difference from M-133 is the elimination of the requirement that no person shall manufacture or process rotenone insecticides in the form of dust or powder with a content of more than one-half of one percent except as otherwise specifically authorized or directed. This modification removes the restrictions of previous orders of War Production Board on the amount of rotenone that may be included in insecticidal dusts. The revised order continues the provision that "no person shall manufacture or process any rotenone insecticide incorporating pyrethrum." It also continues the provision that War Production Board may issue to processors of rotenone or to manufacturers of rotenone insecticides written directions as to the content, kinds and grades

of processed rotenone or rotenone insecticides, or the size of packages in which the insecticides may be packed. The section of the preceding order (M-133) referring to use orders issued by War Food Administration is continued without change. The modification of War Production Board order does not amend the War Food order dealing with rotenone insecticides.

Copper chemicals.--On September 13, 1944, Recording Secretary, War Production Board, issued Schedule 47 to General Allocation Order M-300. This schedule deals with copper chemicals, including those used in the manufacture of fungicides and related materials and those used for mildew-proofing. The provisions of this order are substantially the same as those of M-227, which was issued initially under date of October 1, 1942, and which is revoked by the revised order. It provides for continuing the allocations on a quarterly basis.

Arsenic.--On September 13, 1944, Recording Secretary, War Production Board, issued Schedule 46 to General Allocation Order M-300, which deals with arsenic. This order covers the use of arsenic for a wide variety of purposes, including many agricultural uses, as for the manufacture of insecticides, cattle dips, poison bait, weed killers. The revised order contains the same general provisions as order M-152, initially issued May 22, 1942, and which is revoked by the issuance of this schedule. It provides for continuing the allocations on a quarterly basis.

Pyrethrum.--On September 13, 1944, Recording Secretary, War Production Board, issued Schedule 48 to General Allocation Order M-300 which deals with pyrethrum. This order contains substantially the same provisions as the last revision of Allocation Order M-179, which was initially issued on July 1, 1942 and is hereby revoked. It provides for continuing allocations on a monthly basis. The revised War Production Board order does not amend the War Food order governing the agricultural uses of pyrethrum insecticides.

DDT.--On June 15, 1944, the Recording Secretary, War Production Board, issued Schedule 25 to General Allocation Order M-300 dealing with the chemical 2,2-bis (parachlorophenyl) 1,1,1-trichloroethane, commonly referred to as DDT. This order prescribes the procedures used by suppliers in applying for delivery of DDT and for the procedures followed by the customer's application to use or accept delivery. Persons seeking authorization to use or accept delivery shall file application on Form WPB-2945 (formerly PD-600). The application should be filed on the 10th of the month before the requested allocation month. The procedure set forth in this schedule is the same as has been in use during most of the current season.

Methyl bromide.--On August 24, 1944, the Recording Secretary, War Production Board, revoked Direction 1 to Allocation Order M-340, which dealt with methyl bromide. The revocation of this order removes methyl bromide from allocation by War Production Board.

December 2, 1944

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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WAR FOOD ORDERS ON PYRETHRUM AND ROTENONE REVOKED

On November 27, 1944, the Assistant War Food Administrator revoked (effective November 29, 1944) the War Food orders pertaining to agricultural uses of pyrethrum and rotenone insecticides. The order dealing with pyrethrum was originally known as Food Production Order No. 11 and later known as War Food Order No. 46. The order relating to rotenone was originally referred to as Food Production Order No. 13 and later known as War Food Order No. 49. In reference to the revocation of these two orders War Food Administration released on November 28 a statement which included the following:

"WFA officials said the revocation of the orders does not reflect any change in supplies of pyrethrum and rotenone, which are scarce. They pointed out, however, that agricultural end use of the materials could be controlled effectively through the WPB allocations and that War Food Orders 46 and 49 can therefore be revoked, in line with the WFA policy of terminating its wartime controls whenever practicable. This now makes a total of 61 War Food Orders terminated.

Under WFO 46, pyrethrum has been made available only upon direct request for a specific use.

Under WFO 49, there has been a list of permitted agricultural uses for rotenone insecticides. War Production Board will use the same list in making future allocations. The list includes five classifications of permitted uses: 11 commercial crops or groups of crops and specific insects; non-commercial garden crops; animal uses (cattle grub and lice and sheep tick); experimental purposes; other agricultural uses, which may be determined by WFA."

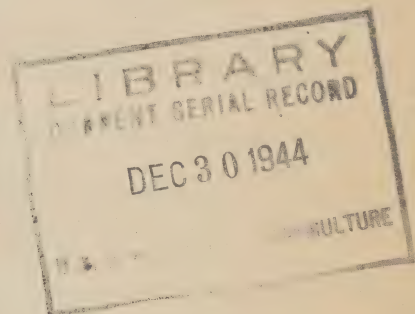
The revocation of the War Food orders affecting these two insecticides does not remove restrictions as to the use of these materials. They are still under control by the War Production Board, and processors, mixers, and manufacturers will continue to apply for and secure monthly allocations for supplies of rotenone and pyrethrum to be used for agricultural insecticides. War Production Board orders pertaining to these insecticides are Schedule 48 (Pyrethrum) and Schedule 49 (Rotenone) under General Allocation Order M-300 (see War Letter for September 15, 1944).

Pyrethrum.--The allocation of supplies of pyrethrum that are available for agricultural insecticides will be considered on specific request. Information on the proposed use, as to pest, crop, livestock, etc., should accompany each request for allocation. The quantity of pyrethrum that may be available for agriculture is still limited and allocations will, in all probability, be restricted to uses for which material has been supplied during the past season.

Rotenone.--The supplies of rotenone for agricultural insecticides will be allocated by War Production Board as to use, following the pattern of the past season and in general accord with the regional requirements of the food crops and livestock uses. Modifications from such a pattern will be made by them only after special consideration and conference with appropriate officials and with due regard to the need for protection of important food crops and livestock.

The current War Production Board order continues the provision that no person shall manufacture or process any rotenone insecticides incorporating pyrethrum without their approval. It also contains no restrictions as to the rotenone content of insecticides offered for sale. This means that the industry can produce and market rotenone insecticides without restrictions as to rotenone content. The War Production Board order does not require specific labeling, but it is presumed that manufacturers will, by label or otherwise, acquaint purchasers of the uses for the products they produce. The rotenone insecticides produced for marketing interstate under future allocations will, therefore, be specifically governed only by the requirements of the Insecticide Act of 1910. This returns to the industry the responsibility for the performance of the products they manufacture and market.

* * * * *



February 13, 1945

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From

Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

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SPECIFIC ALLOCATION BY WAR PRODUCTION BOARD NO LONGER REQUIRED
TO SECURE DDT FOR EXPERIMENTAL PURPOSES

Under date of February 12, 1945 the War Production Board issued a press release, concurred in by War Food Administration and Office of Civilian Requirements, stating that limited quantities of DDT have been released to DDT producers for agricultural and other civilian experimentation.

The production and distribution of the chemical DDT still remain under control by the War Production Board. The new procedure, however, provides that limited quantities of DDT are released, under the provisions of paragraph (f) of Order M-300, for experimental purposes and that specific allocation is no longer required to secure supplies for experimental purposes from the producer. The distribution of supplies of DDT available for experimental purposes is now in the hands of the DDT producers, who will make it available for research directed toward development of commercial use of the chemical.

In releasing material for experimentation the War Production Board instructed the DDT producers that in determining eligibility to receive DDT for experimental purposes they should consider the following factors:

- (1) The supervision of the experiments by competently trained and experienced investigators;
- (2) The type of experimentation proposed and whether it will contribute to the knowledge and development of the use of DDT, including (a) chemical and physical characteristics, (b) pharmacology, (c) toxicology, (d) compatibility with other materials, (e) formulation of insecticides.

Where a large quantity is requested, careful scrutiny should be exercised to see whether appropriate and adequate checks are to be maintained. The results of these large scale tests should be recorded and appraised by competently trained investigators.

War Production Board has informed the DDT producers that they will be allocated stated quantities of DDT that they may use or distribute for experimental purposes. The allocations will specify the quantity for experimental agricultural work and the quantity for civilian research. The initial allocations to producers will be for amounts for distribution during the period February 15 to May 15, 1945.

The DDT producers have also been advised by the War Production Board that they may, should they desire, request the advice of the War Production Board DDT Committee in considering any request for material for experimental use.

* * * * *

WAR PRODUCTION BOARD

For Immediate Release
Monday, February 12, 1945

Cleared and Released
Through Facilities of the
Office of War Information

A limited quantity of DDT, the war-developed insect killer, has been released to DDT producers for distribution for agricultural and other civilian experimentation, the War Production Board reported today.

Formerly requests for DDT for research work required application to WPB for individual allocations of the chemical. Released according to the provisions of Paragraph (f) of Order M-300, the general chemicals allocations order, the material can now be obtained directly from DDT producers without further permission from WPB. DDT is governed by Schedule 25 of Order M-300.

Although direct military uses have required the entire supply of DDT, a limited quantity will be made available for research directed toward development of commercial uses for the chemical, WPB said.

In releasing the material for experimentation, WPB's Office of Civilian Requirements and the War Food Administration instructed that DDT producers in distributing the chemical give consideration to work carried out under the supervision of experienced investigators, aimed at determining the suitability of the chemical for agricultural and other civilian uses.

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FEDERAL SECURITY AGENCY
FOOD AND DRUG ADMINISTRATION
WASHINGTON, D. C.

January 26, 1945

Dear Sir:

"We recognize, of course, that in the complete entomological evaluation of a new insecticide such as DDT, it may at certain stages be necessary to spray relatively large plots and that a considerable quantity of a commodity from such plots may enter interstate commerce. We have, therefore, been giving consideration to the problem you have presented.

Several pharmacologists and toxicologists, including those of our own Administration, have been intensively studying DDT for more than a year and some of the experiments are not yet completed. Nevertheless on the basis of available data they are in general agreement that DDT is not more toxic than lead or fluorine. As you are aware, I am sure, a formal tolerance of 7 mg./kg. for fluorine on apples and pears has been announced. An informal tolerance of 7 mg./kg. for lead on apples and pears has been recognized for several years.

In view of the agreement among the toxicologists concerning the quantitative relationship of the toxicity of DDT to that of lead and fluorine, this Administration has concluded that during the coming year it will not be its purpose to inaugurate regulatory action against commodities containing 7 mg./kg. or less of DDT.

In view of the incompleteness of the toxicological data, as well as the incompleteness of data being collected by experiment stations with regard to the insecticidal usefulness, best formulas, and the efficacy of washing procedures, it would seem premature to take steps toward establishing formal tolerances at this time."

Very truly yours,

/s/ P. B. Dunbar

Commissioner of Food and Drugs

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July 27, 1945WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

INFORMATION IN REFERENCE TO DDT

The accompanying statements giving information in reference to DDT will, it is believed, be of interest to you. They are as follows:

1. Press release from War Production Board
2. Statement - DDT for Agricultural Use
3. Definition of Terms for DDT, Adopted by DDT Committee, Manufacturing Chemists' Association of the U. S., July 10, 1945.

In addition to the statement in the accompanying release by War Production Board that DDT will be released for possible civilian use, War Production Board proposes to issue at an early date a revision of the allocation order governing the chemical DDT -- M-300, Schedule 25. It is understood that the revised order will include a new definition for the chemical DDT which will include certain by-products of production. It will also include a revised definition of "producer of DDT," which in effect will provide that a producer of DDT, in the terms of the order, is one who produces more than 1,000 pounds of the chemical per month.

The accompanying press release from War Production Board points out that in the next few months only very small quantities of DDT will be available for civilian and agricultural uses under the new procedure. Military requirements will be met first. Following that, essential uses in the public health field by governmental agencies will be met. The amounts required to meet specific claims for agriculture, including amounts needed for research, will be next in line. Until supplies are more generally available it should not be expected that DDT will be available to producers in quantities sufficient to manufacture insecticides in amounts generally desired for use by civilians.

The amount of DDT that will be available for distribution by the industry without restrictions is that which is above military requirements and that above the claims for the main claimant agencies. The Office of Civilian Requirements of War Production Board, which is the civilian claimant agency, indicates that they will claim (1) amounts of DDT required by U. S. Public Health Service for its programs to control insect pests, particularly

those that are vectors of human diseases; (2) amounts that will be required for civilian experimentation; and (3) amounts that may be needed for specific civilian uses that are later developed. The attached statement on DDT for Agricultural Use indicates the attitude of the Office of Materials and Facilities of the U. S. Department of Agriculture, which is the claimant agency for the agricultural use of DDT insecticides. Only two specific claims have been approved and specific amounts requested for agricultural use. These are for the control of potato flea beetle in Oregon and for the control of lice on cattle in Idaho.

The joint committee on specifications of the Army and Navy will issue shortly to DDT producers revised specifications for the chemical DDT. It is understood that for technical DDT the revised specifications will provide for a minimum setting point of 89° C., and a new method of analysis. It is understood that this will not affect the quality of the product which has been produced under previous specifications. The change will only provide for the results obtained by the use of the new method of analysis.

In the production of aerosol or purified grade of DDT the producers have by-products which contain a percentage of para, para-isomer and a percentage of ortho, para-isomer of DDT. These by-products, which may be available in considerable quantities, are not required for use by the Armed Forces. Although the by-products contain toxic parts of the chemical DDT, they should not be confused with the technical or purified product. The amount of experimental work that has been done with these by-products is limited, and little is known about the effect they or their residues may have on foliage, soil, and animals. It is believed that entomologists in their experiments and in any recommendations they may wish to make in reference to DDT insecticides should keep in mind the difference between DDT by-products and technical DDT.

The results of the season's experimental work on DDT insecticides are not yet available. At this time it is difficult to forecast what uses may be recommended for DDT insecticides in the civilian and agricultural fields. The research to determine facts on the insecticidal uses of DDT has been carried on largely by entomologists associated with governmental institutions. This has been supplemented by research carried on by industry. It is believed important that entomologists make available information as a result of their experimentation as rapidly as practicable and that they advise with the industry which has now the responsibility and privilege of producing DDT insecticides for sale. The situation in reference to the development and use of DDT insecticides is different from that of most other new materials, and entomologists - state and federal - have an unusual responsibility in guiding their development and use.

* * * * *

WAR PRODUCTION BOARD

For Immediate Release
Thursday, July 26, 1945

Cleared and Released
Through Facilities of the
Office of War Information

Beginning in August, limited quantities of DDT will be made available for civilian and agricultural use, War Production Board officials told the members of the DDT Producers Industry Advisory Committee at their meeting yesterday, the agency reported today. This is possible because of increased production of DDT. Civilian and agricultural use of DDT has been restricted solely to experimental purposes.

WPB emphasized that the quantities to be distributed to civilians for household and agricultural use in the next few months will be small and will meet only a small percentage of the civilian demand for the war-developed insecticides. These allotments will not be increased until there is a cut in military requirements, the agency added.

Specific allocations will be made to the Public Health Service of the Federal Security Agency to meet all requirements for programs related to the control of disease-carrying insects.

Sievert A. Rohwer assistant chief of the Bureau of Entomology and Plant Quarantine of the Department of Agriculture, cautioning the committee, said:

"Industry has a privilege and a responsibility, and must use DDT wisely, both in the interest of public welfare and for the good of the industry. There is a great deal that is yet to be learned about how to safely use DDT insecticides, from the standpoint of hazard to user, to the consumer of the products on which residues may occur, the effect they may have on soils, and on the whole balance of nature in terms of beneficial insects and wild life."

The committee discussed a proposed revision to Schedule 25 (DDT) of the general chemicals allocation order, M-300, in line with this liberalized policy. It recommended that a production exemption be included in the amended order to permit the very small producers to operate without War Production Board authorization for the sale of their output.

The committee approved the WPB proposal that excess material, after military needs are met, be placed under paragraph (f) of M-300. With such an arrangement, a person desiring DDT can obtain it from his preferred supplier, if material is available. No application forms, end use certificates or WPB authorizations would be required.

Dr. G.F. MacLeod, chief of the Chemical and Fertilizers Branch of the Department of Agriculture, said the Department of Agriculture would not request DDT for specific use unless the following requirements were fulfilled:

1. The crops of animals to be protected must be an important part of the food program.
2. No other insecticide is satisfactory, or satisfactory insecticides are not available.
3. Considerable loss will be involved if DDT is not obtained.

(over)

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4. Use is officially recommended by the Bureau of Entomology and Plant Quarantine of the Department of Agriculture, or by a State official qualified to make recommendations.

5. The person responsible for making the recommendation and requesting its allocation should indicate his willingness to keep a watchful eye on its use so that it will not involve quantities in excess of those approved and actually needed.

6. It should be determined and stated by a qualified official that no deleterious residue problems will be involved in its use.

7. Similarly, a qualified official must indicate that the danger of poisoning bees, of upsetting the biological complex, is not such as to create a hazard in the proposed use of DDT.

###

DDT FOR AGRICULTURAL USE

Requirements used by
Office of Materials and Facilities of U. S. Department of Agriculture
in presenting requests for DDT for agricultural use to
War Production Board

- "1. The crops or animals to be protected must occupy important positions in our food production program.
2. It must be shown that no other insecticides are satisfactory for controlling the pest or pests under consideration, or that satisfactory insecticides are not available.
3. Without protection by the use of DDT insecticides it must be shown that a considerable loss will be involved.
4. The use of DDT insecticides must be officially recommended for the particular use in question either by the Bureau of Entomology and Plant Quarantine, in which case its use may be considered nationally, or by a qualified official of an experiment station responsible for making recommendations, in which case it could be considered for use only in that particular state.
5. In the case of limited uses, such as appeals for specific purposes, the person responsible for making the recommendations and requesting its allocation should indicate his willingness to keep a watchful eye on its use so that it will not involve quantities in excess of those approved and actually needed.
6. It should be determined and stated by a recognized authority that there will be no deleterious residue problems involved in its use.
7. Similarly a qualified official must indicate that the danger of poisoning bees or upsetting the biological complex is not such as to create a hazard in the proposed use of DDT."

* * * * *

Office of Materials and Facilities of U. S. Department of Agriculture has made it clear to War Production Board and producers of DDT that they will claim from the DDT production those quantities needed for adequate experimentation in agriculture in event desired supplies are not made available by industry under the new procedure.

Attachment to War Letter for
Entomology and Plant Quarantine
July 27, 1945

THE UNITED STATES OF AMERICA

OFFICE OF THE SECRETARY OF THE ARMY
WASHINGTON, D. C. 20315
JANUARY 1954

MEMORANDUM FOR THE SECRETARY OF THE ARMY
SUBJECT: [Illegible]

1. [Illegible]

2. [Illegible]

3. [Illegible]

4. [Illegible]

5. [Illegible]

6. [Illegible]

Very truly yours,
[Illegible Signature]

DEFINITION OF TERMS FOR DDT

Adopted by DDT COMMITTEE

Manufacturing Chemists' Association of the U.S., July 10, 1945

1. The contraction DDT was first suggested by officials of the British Ministry of Supply early in 1943. This abbreviation was later adopted by agencies of the American Government for that class of chemical compounds known generically as Dichloro-diphenyl-trichloroethane.

2. DDT currently produced for and procured by the Military under government specifications

JCQD 1005A (December 29, 1944)

JAN-D-56 (June 30, 1944)

Bureau of Ships 51-1-12 INT (May 15, 1944)

is the product obtained when one molecule of chloral and two molecules monochlorobenzene react with each other in the presence of concentrated sulfuric acid. This reaction mixture consists essentially of 2,2 bis-(p-chlorophenyl) 1,1,1-trichloroethane, lesser amounts of other isomers, and by-products of reaction. If the product resulting from any other process is identical, the use of raw materials other than chloral and monochlorobenzene for the production of DDT in no way would affect or change the nature and character of these definitions and terms.

The melting point of this isomer mixture is not sharply defined, and in line with the usual practice in dealing with such products, the above specifications have assigned a "setting point" value of 88° C. minimum and designate the product as "DDT (dichloro-diphenyl-trichloroethane) Technical." Therefore, this product is best described as:

DDT (dichloro-diphenyl-trichloroethane) - Technical
(Setting Point 88° C. minimum)

3. Other refined or purified grades may be required for specific purposes. For example, JCQD 1005A (December 29, 1944) provides for a purified DDT possessing a "melting point of 103° C. minimum." This quality grade can best be described as:

DDT (dichloro-diphenyl-trichloroethane) - Purified
(Melting Point 103° C. minimum)

4. Future developments may require a more highly purified DDT with respect to a higher content of the para para isomer, or even require some one specific pure isomer. In such an event, sufficient descriptive designations are already in established use in the fine chemical industry to adequately describe the quality, if specifications therefor promulgate--i.e., U.S.P., C.P., Reagent. Eventual designation of such quality products is best described by the generic chemical name dichloro-diphenyl-trichloroethane as the main title, followed by the chemical name for the specific isomer as a subtitle in parenthesis. For example:

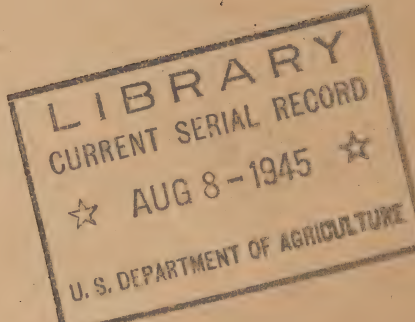
Dichloro-diphenyl-trichloroethane-Reagent
(2,2 bis-(p-chlorophenyl) 1,1,1-trichloroethane)

5. Formulations: It is recommended that when DDT is shown as an ingredient, the statement be worded as follows:

Active Ingredient DDT (dichloro-diphenyl-trichloroethane)-Technical.....xx%

Other ingredients, active or inert, should be shown as required by regulations.

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August 15, 1945

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From

Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

WAR PRODUCTION BOARD ORDER ON ARSENIC REVOKED

On August 11, 1945 the Recording Secretary of War Production Board revoked, effective August 11, 1945, Schedule 46 of General Allocation Order M-300 controlling arsenic. This removes from control of the War Production Board a material used for the manufacture of some of the most widely used insecticides.

In connection with the revocation of this order it is pointed out that there is available in the Western Hemisphere sufficient quantities of arsenic to meet immediate requirements and that supplies are available in Sweden which can be imported as shipping conditions become more normal. It is also indicated that there is considerable carry-over of standard arsenical insecticides. The supply situation in reference to arsenical insecticides is abundant for current needs and should be fully adequate for next season. Transportation and containers may still present a problem in the distribution of supplies.

* * * * *



1941

THE UNITED STATES OF AMERICA

Department of the Interior
Bureau of Land Management
Washington, D. C.

This is to certify that the following land is owned by the United States of America, and is subject to the provisions of the Act of March 3, 1879, relating to the disposal of the public lands.

Section 36, Township 10 North, Range 10 East, 1st Meridian, in the State of Montana.

And it is further certified that the same is subject to the provisions of the Act of March 3, 1879, relating to the disposal of the public lands.

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Cap 3
August 22, 1945

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

REVOCATION OF WAR PRODUCTION BOARD ORDERS ON INSECTICIDAL CHEMICALS

On August 20 War Production Board issued a blanket revocation order covering many chemicals which are used in the manufacture of insecticides. This order revokes the controls provided by a number of schedules under Allocation Order M-300. The date when revocation becomes effective differs with various schedules. After the revocation order becomes effective procurement and uses of the respective chemicals will no longer be under control and supplies will be obtained through normal trade channels.

The following lists the more important chemicals used in the production of insecticides covered by the blanket order and indicates the date the revocation becomes effective.

DDT

Allocation Order M-300, Schedule 25, dealing with DDT, is revoked effective August 31, 1945. Drastic cutbacks in military procurements will release to producers supplies of this chemical even during the remainder of August in amounts in excess of those made available without restriction to the industry by allocations following action that was effective August 1, 1945.

Chlorine

Allocation Order M-19 dealing with chlorine is revoked effective August 31, 1945.

Benzene

Allocation Order M-300, Schedule 22, dealing with benzene, is revoked effective August 31, 1945.

Sulfuric Acid

Allocation Order M-300, Schedule 74, dealing with sulfuric acid, is revoked effective August 31, 1945.

Copper Chemicals

Allocation Order M-300, Schedule 47, dealing with copper chemicals, is revoked effective August 31, 1945.

-2-

Thallium chemicals

Allocation Order M-300, Schedule 107, dealing with thallium chemicals, is revoked effective August 31, 1945.

Diphenylamine

Allocation Order M-300, Schedule 39, dealing with diphenylamine, is revoked effective August 31, 1945.

Pine oil

Allocation Order M-300, Schedule 73, dealing with pine oil, is revoked August 31, 1945.

Naphthalene

Allocation Order M-300, Schedule 38, dealing with naphthalene, is revoked effective August 31, 1945.

Barium chemicals

Allocation Order M-300, Schedule 31, dealing with barium chemicals, is revoked effective August 31, 1945.

Sodium cyanide

Allocation Order M-300, Schedule 45, dealing with sodium cyanide, is revoked effective August 31, 1945.

Carbon tetrachloride

Allocation Order M-300, Schedule 78, dealing with carbon tetrachloride, is revoked effective August 31, 1945.

Casein

Allocation Order M-300, Schedule 113, dealing with casein, is revoked effective August 31, 1945.

Aromatic solvents

Allocation Order M-150 dealing with aromatic solvents is revoked effective August 31, 1945.

Toluene

Allocation Order M-300, Schedule 21, dealing with toluene, is revoked effective August 31, 1945.

Silica aerogel

Allocation Order M-300, Schedule 114, dealing with silica aerogel, is revoked effective August 31, 1945.

Xylene

Allocation Order M-300, Schedule 23, dealing with xylene (xylol) is revoked effective August 31, 1945.

Carbon black

Allocation Order M-300, Schedule 32, dealing with carbon black, is revoked effective September 30, 1945.

Synthetic Organic Detergents

Allocation Order M-300, Schedule 44, dealing with synthetic Organic Detergents is revoked effective September 30, 1945.

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REVOCATION OF WAR PRODUCTION BOARD ORDER ON COTTON LINTERS

On August 20, 1945 and effective that date War Production Board revoked Allocation Order M-12 dealing with cotton linters and hull fiber.

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OTHER INSECTICIDES

Pyrethrum

At the Pyrethrum Processors Industry Advisory Committee meeting on August 21 it was announced that all end-use controls on pyrethrum were removed effective August 21, 1945. It was also announced that it is proposed to revoke, effective September 30, 1945, Allocation Order M-300, Schedule 48, dealing with pyrethrum. Recent drastic cutbacks in army procurements of aerosols have made large quantities of high grade pyrethrum available for civilian and agricultural purposes. Pyrethrum for civilian and agricultural insecticides is now available through regular channels without restriction and in adequate quantities.

Rotenone

No formal announcement has yet been made in reference to the order (M-300, Schedule 49) controlling rotenone. It is understood that for all practical purposes end-use controls, other than for agricultural use, are not now being enforced. It is also understood that consideration is being given to matters that may be involved when the order is revoked, which possibly may be effective September 30, 1945. Information now available indicates that the supply of rotenone for use next season will be somewhat in excess of the amount available for the current year. At present there is, however, no indication that rotenone supplies will be comparable with the prewar quantities.

Nicotine

The nicotine insecticide supply situation still remains critical. The outlook for adequate supplies for the coming insecticidal year is rather dark. No inventory will be available at the beginning of the year, and the amount of nicotine insecticides that can be produced and marketed will depend on the availability of supplies of raw materials. At the present time it appears that the supply situation for nicotine will remain critical for the next season unless some specific action is taken to provide raw materials for manufacture.

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August 28, 1945

WAR LETTER FOR ENTOMOLOGY AND PLANT QUARANTINE

From
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
U. S. Department of Agriculture, Washington, D. C.

This information is made available so that officials may more effectively carry on their work in connection with the war effort. The edition of this letter will be limited, and those who receive it are urged to make it available to their associates. With the necessarily limited edition it will not be possible to expand the mailing list.

REVOCATION OF WAR PRODUCTION BOARD ORDERS

On August 24, 1945 War Production Board issued blanket revocation of certain orders. These included the following of interest to pest control officials. The materials involved and the date the revocation becomes effective are indicated below.

Pyrethrum

Allocation Order M-300, Schedule 48, dealing with pyrethrum, is revoked effective September 30, 1945.

Rotenone

Allocation Order M-300, Schedule 49, dealing with rotenone, is revoked effective September 30, 1945.

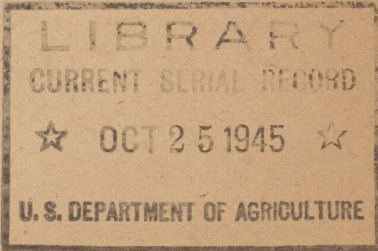
Natural Resins

Allocation Order M-300, Schedule 96, dealing with natural resins, is revoked effective September 30, 1945.

Liquefied Petroleum Gas Equipment

Limitation Order L-86, dealing with liquefied petroleum gas equipment, was revoked effective August 24, 1945.

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